University News

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D.K. GHOSH

Cost Effectiveness and Performance Indicators in Higher Education

S. ABDUL KAREEM

Generating Resources for the Colleges

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— The Delhi University Model

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Criteria for Excellence for Educational Administrators

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The Glory of Sanskrit Literature

— Convocation Address

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Association of Indian Universities

NATIONAL COUNCIL FOR TEACHER EDUCATION

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As per the Parliament Act (1993), the National Council for Teacher Education (NCTE) is being operationalised for achieving planned and coordinated development of teacher education system for the country, the regulation and proper maintenance of norms and standards in the teacher education system and for matters connected therewith.

NCTE will be processing the cases of recognition of courses, programmes, institutions dealing in teacher education in Pre-Primary, Primary, Secondary, Senior Secondary, Adult Education and Vocational Education. For the purpose of recognition of such teacher education institutions and programmes, NCTE is compiling a database directory.

Earlier in March, 1995, all teacher education institutions must have received a proforma from Universities, and/or Boards for furnishing information to the NCTE which is reproduced below. A few institutions have not yet responded.

We are again approaching you with a request that you may provide the proforma based information in the format given below. Institutions who fail to respond to this communication within 20 days of this publication will be presumed to be not interested in the continuation and recognition of their courses and programmes.

Member Secretary

MATERIAL FOR THE DIRECTORY OF TEACHERS TRAINING INSTITUTIONS IN INDIA

1. Name of the institution ______________________________
   STD Code ☐☐☐☐☐☐☐
   Phone No.(S) ☐☐☐☐☐☐☐☐
   ☐☐☐☐☐☐☐☐

2 Postal Address ______________________________

3 Year when established ______________________________

4 Financial Status
Govt. Institution ☐
Govt. Aided ☐
Self Financed ☐

5 Nature of Governance ______________________________

6 Name and Address of Principal/ ______________________________
Head ______________________________ PIN Code ______

7 Staff Strength

	Sanctioned	In Position
(a) Academic		
(b) Supporting Staff		

8 Teacher Education/Courses Offered

a) Pre-Service

Courses	Duration or Credits	Sanctioned Intake	Examining or Affiliating Body
i)			
ii)			

9. Inservice
Programmes Offered last year ______________________________
Clientele ☐
Total Participants ☐
Programmes proposed this year ______________________________
____
____
Clientele ☐
Total participants trained per year ☐
Any other information about your institution
____

* Please attach a copy of your Prospectus/Magazine/Brochure, any other report for the general interest of the NCTE.

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Designation

Signature of Head of the institution

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Editor :
SUTINDER SINGH

Cost Effectiveness and Performance Indicators in Higher Education

D.K. Ghosh*

What is Cost Effectiveness?

The term 'cost-effectiveness' can be given a number of meanings. To a layman, the term means procuring a commodity or getting a service or return of an investment against a certain money value, which is lower than the former. In other words, if the cost is higher than the effectiveness of a service or commodity, there is no cost effectiveness. Precisely, to ensure cost-effectiveness, it has to be seen 'whether or not one is getting the greatest possible pay off for one's expenditures'. Yet another meaning could be that "alternate proposals be compared only on the basis of cost once they all meet minimum effectiveness levels".

Why Cost Effectiveness?

In the context of the resource crunch which now is national and global too, there is an imperative need to be cost-effective in the management of various sectors including education. In a world of scarce resources, as a matter of policy, every organisation has necessarily to be cost effective in its operational activities. That is also necessary for 'accountability'. While this is certainly the approach of the profit making organisations, even for the public funded organisations, it is equally necessary to be cost-effective for the money comes from the tax payers. This is, however, only one aspect of accountability to the public and the government.

In the process of examination of cost-effectiveness, a few related questions arise such as :

- What price the direct beneficiaries should pay?
- How optimally the services of the faculty and other staff members are utilised and for what compensation?
- How best the physical facilities are utilised?

Broadly, these are the related issues involved in the discussion of cost-effectiveness. The question of price payment by the direct beneficiaries i.e. students, is relatively less complex, albeit not so easy. This paper will discuss about the performance of the organisation as a whole and the need to develop indicators to measure performance without which it is not possible to ensure cost effectiveness.

Why Performance Indicators?

Evaluation of any organisation is essential for its survival and development and performance indicators serve purposes of a number of aspects of evaluation of an organisation and one of them is to find out whether cost effectiveness has been achieved and if so, how best? Cost effectiveness cannot be achieved without developing, constructing and monitoring Performance Indicators in relation to the services rendered by the staff members and the physical facilities that are utilised for the set objectives,

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Registrar, IIT, Bombay-400 076.

against given costs. Unless well thought norms are developed to measure the performance of an individual, his department including the physical facilities, and finally the institution as a whole, the objectives *cannot* be achieved.

Broadly, performance indicators would serve three purposes :

One : to know the performance level of the individual and his department in relation to others in the department and of the department with another similar department, within the institution, needed for various purposes including internal allocations of funds and facilities.

Two : to compare the performance of one institution with another of similar type and level which is often required by various organisations for a number of purposes including allocation of funds by funding organisations.

Three : to provide an in-built mechanism by which 'accountability' of the Institution becomes clear and known. The picture will tell everybody how much it has fulfilled its obligations of 'accountability', to what extent 'cost-effectiveness' and set objectives have been achieved.

However, this paper would discuss about the performance indicators of the Institution as a whole.

Norms for Performance Indicators

Admittedly, it is a complicated and difficult job to decide the norms for performance indicators for there would always be scope to speak 'for' or 'against' any norms. Some even consider that the construction of acceptable Performance Indicators is not only 'immensely difficult' but 'perhaps ultimately impossible'. The truth is somewhere in between for neither there could be all fully acceptable and workable indicators nor is it 'impossible' to construct indicators.

It has also to be admitted that there are some norms which have universal acceptance. For example, in the higher education sector, there cannot be any dispute that the quality of education, as evidenced by the quality of students and their acceptance in the market should be the most important indicator of good performance. However, the debate rests on how is 'quality' defined. Here comes the question of developing suitable parameters.

Performance Indicators in UK

Perhaps because of the inherent difficulties to develop and construct perfect Performance Indicators, even in a country like UK which has the history of higher education of over 700-800 years, beginning with the Oxford and Cambridge universities, until the second half of 1980s, no serious effort was made in this regard. However, there were isolated efforts in some universities some 20-25 years ago also.

Consequent to the 1981 resource crunch in higher education in UK during the regime of Margaret Thatcher, when as a result of the general policy to reduce public expenditure, government grants were reduced, on selective basis, by 6% to 44% pushing the universities to the wall. Some of them even faced almost a situation of 'bankruptcy'. From that time onwards, there was serious thinking and efforts were made to develop Performance Indicators primarily to ensure 'cost-effectiveness' and 'accountability' and also to compare one university with another to achieve transparency.

In the Green Paper, 1985, of the Government of UK on the *Development of Higher Education into the 1990s*, for the first time, the government showed interest to develop vigorous procedures for evaluating the higher education sector. This interest was restated in the subsequent White Paper on Higher Education, *Meeting the Challenge*. As part of the various declared policy points, the Government of UK felt that the efficiency of the universities will be increased by :

- improvement in institutional management,
- changes in the management of the system, and
- the development and use of performance indicators.

The Jarrat Committee (1985) was appointed by the Committee of Vice-Chancellors and Principals (CVCP) which included representatives of the Government and UGC to inquire into the efficiency and effectiveness of the universities. Its recommendations are still current in the higher education sector of UK. The Jarrat Committee had prepared the following indicators :

A. *Internal Performance Indicators*, to include

- market share of undergraduate applications (by subject),
- graduation rates and classes of degrees,
- attraction of masters and doctoral students,
- success rate of higher degrees (and time taken),
- attraction of research funds, and
- teaching quality.

B. *External Performance Indicators*, to include

- acceptability of graduates (postgraduates) in employment,

- first destination of graduates (postgraduates),
- reputation judged by external reviews,
- publications by staff and citations,
- patents, inventions, consultancies,
- membership, prizes, medals of learned societies, and
- papers at conferences.

C. *Operational Performance Indicators*, to include

- unit costs,
- staff/student ratios,
- class sizes,
- course options available,
- staff workloads,
- library stock availability, and
- computing availability.

The recommendations of the Jarrat Committee were carefully examined by a Working Group of the Committee of Vice-Chancellors and Principals (CVCP) and UGC which identified the following characteristics of the indicators :

1. they should relate to the objectives of universities, especially those concerned with teaching and research;
2. they should be specific, quantifiable and standardized so that comparisons can be made within and between institutions;
3. they should be as simple as possible in order to aid understanding of the activities of universities about which they provide information;
4. they should be acceptable, credible and free from bias; and
5. they should provide useful information about the operations and activities of institutions and they should be expected to provoke questions about these operations and activities.

Relating Objectives to Performance

For evaluating the performance of the institution, the pre-requisite is to establish each Institute's objectives for it is with reference to them that the Institute works to achieve them. Although every educational institution's broad objective is to train students, but there is always a difference in that for one institution's objective could be to see that the pass percentage is good while another may set its objective to ensure that the larger number should pass in first class. Yet another institution's objective could be besides very good result of the students, to undertake research activities of a high order. Once the objectives are established, it becomes easy to attempt to find out how much the objectives have been achieved and what was the cost factor.

Basically teaching and research are the two parameters of performance of a university. While the quality of the products (i.e. students) will testify the success of teaching efforts, the ratings of research activities undertaken by the university will tell the level of research.

Research Rating in UK

In UK, over the years, the Universities Funding Councils have developed the following five point scale for Research Rating:

Point 5 = Research quality that equates to attainable levels of international excellence in some sub-areas of activity and to attainable levels of national excellence in virtually all others.

Point 4 = Research quality that equates to attainable levels of national excellence in virtually all sub-areas of activity, possibly showing some evidence of international excellence, or to international excellence in some and at least national level in a majority.

Point 3 = Research quality that equates to attainable levels of national excellence in a majority of the sub-areas of activity, or to international levels in some.

Point 2 = Research quality that equates to attainable levels of national excellence in up to half of the sub-areas of activity.

Point 1 = Research quality that equates to attainable levels of national excellence in none, or virtually none, of the sub-areas of activity.

Five Point Performance Indicators to Assess

Finally, five Indicators to assess the performance of the universities have been developed as follows :

1. the non-completion rate (NCR)
2. the percentage of graduates obtaining a first or upper second class honours degree (Degree Result)
3. the percentage of graduates obtaining permanent employment (Employ)
4. the percentage of graduates proceeding to further education or training (Further)
5. the average research rating obtained by each university in the UFC's 1989 Research Selectivity Exercise (Research)

Based on the above five indicators, a comparison of the ranking of the Universities of UK derived from various performance indicators has also been attempted.

The validity of the performance indicators may be subject to questions for different universities operate under different circumstances, e.g. location, funding, ability to attract good students and competent faculty, etc. For example, the employability of new graduates will always be higher in industrial belts and lower in the remote places. Therefore, to compare justifiably between two such universities, extra points need be given to make up for the disadvantage of location.

Unit Costs of Students

To achieve cost-effectiveness, it is important that unit costs of students are established which would help ensure cost-effectiveness in particular, and towards the performance evaluation of the university in general.

Statistical Record

If Performance Indicators are to be developed, dependable relevant statistics are the pre-requisite. Unless dependable statistics are collected in relation to various activities and management of the universities in the properly designed formats for computer analysis, just developing the indicators will not serve the purpose. The current statistics collected in India by UGC are not adequate either in terms of matters or form.

Undeniably, it is a gigantic task involving vision, vigour and funds. It may be worthwhile to handover the responsibility to a professional organisation which may be authorised to collect statistics from the universities and colleges and publish them at reasonable cost. If all universities, colleges, relevant government departments and others purchase them, that will serve the purpose of all. Even if UGC may have to provide some funds to the organisation to collect and publish statistics, that would be cost-effective in real terms. The UGC should in such an event prescribe such conditions as may be necessary to serve the purpose. In any case, whether for the performance indicators or otherwise, dependable statistics of our higher education is a must.

Alternatively, a University Statistical Board may be established. But, that may not be cost-effective. The question of professionalism can also be raised.

In UK, to meet such needs, Universities' Statistical Record was established in 1968 under the joint auspices of UGC and CVCP for more comprehensive statistics on staff and students in higher education. Computer based information is collected and provided covering :

(a) undergraduate and postgraduate students,
(b) the first destination of graduates,
(c) academic and academic related staff, and
(d) continuing education courses.

Developing Performance Indicators in India

The entire higher education sector of India is passing through an unprecedented crisis on several fronts, the most important of which is the resource crunch. For a variety of reasons, the problem of funds has always been with the universities, but it has never been so acute, so pressing as it is today. And tomorrow, it will be more acute unless everybody in the game takes the challenge seriously and face boldly. In this, the role of the faculty, students and administrators is crucial.

Today, we have universities, colleges and other institutions of higher learning of varying standing, level and quality. There are striking differences among many of these institutions in terms of funds, quality of faculty, students' level, their employability and research activities. However, such differences among universities are there in other countries also including developed countries.

Conclusion

Now that we have to learn to be cost-effective and efficient which is a *sine-qua-non* even for survival in the present situation of resource crunch and competition, serious efforts should be made to develop Performance Indicators so that while they may serve for internal assessment which will help corrections and improvements, they will also serve as a judicial basis for internal allocation of funds and facilities.

Importantly, they will also help the system to be transparent and the much needed 'accountability' aspect may then become clear to all concerned. It is only through such processes that improvements will take place. However, all these will take time. Sooner or later, the system will have to go in for these and that is for sure.

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Generating Resources for the Colleges

S. Abdul Kareem*

Introduction

An academic leader, an administrative head, an efficient manager of available resources, a crisis-resolver, a problem-solver, a master with an articulatory edge — varied are the roles and responsibilities of the Principal. Some are blessed to stumble into a well-set infrastructure; some are cursed to inherit the ramshackle machine with faulty alignments. The proliferation of the colleges has been phenomenal; what on the eve of Independence was a bare 700 in number has grown to an alarming figure of nearly 7000. The explosive situation has thrown in its wake institutions of all hues:

(i) a few full-fledged and aided institutions,
(ii) some aided but with inadequate infrastructure, and
(iii) a large number neither aided nor with adequate infrastructure.

Their multiplication is more often dictated by political pressures and not on academic considerations. Those in the first category have a smooth sailing and the ones in the last category are to fend for themselves. The middle category deserves an analysis, nay, a diagnosis, if they are to survive the onslaughts of competition.

The second category, of those aided but inadequately equipped, taxes the ingenuity of the Principal. They have a history of nearly 2-3 decades, established and funded during the stable decades after planning, when the outlay on education was respectable and their being brought under aid was more less a routine affair. The following table shows how the outlay down the plan periods has dwindled.

Table 1 : Allocation to Education in Five Year Plans

Plans	*Share of education in total Plan Outlay (%)*
First Five-Year Plan	7.86
Second " " "	5.83
Third " " "	6.87
Fourth " " "	5.04
Fifth " " "	3.27
Sixth " " "	2.70
Seventh " " "	3.55

The strange thing about these institutions is that while the teachers receive their salaries in full from the government directly, the institutions languish for the lack of the wherewithal relying more on the inflow of the antiquated pattern of fees at the single rate of standard tuition fee, generally paid by the students on admission, which could be retained by the colleges for their maintenance. Since a large number of students claim exemption from this payment on consideration of annual income of the parents being less than Rs. 3600/- or on the caste certificates, the institutions having admitted them on the strength of these documents and declarations, have to wait nearly one year to have the fee reimbursed by the government. The fee-paying category being less than 35-40% of the total strength, the inflow of resources at the beginning of the academic year is bound to be low.

With the Managements not coming to the rescue of the colleges during this interim period, the institutions suffer in terms of the inputs; plans and projects dither and the chief executives have to drag their feet, not able to implement the decisions already taken. The changes in the syllabi and the pattern necessitate the addition of new equipment, new sets of books, and in some cases additional classrooms and extension of the laboratories which can hardly be met. The resources crunch as it were strangulates the whole educational endeavour reducing it to a mockery. The assistance from the UGC during the plan period is available hardly to 20-25% of the colleges as most of them fail to fulfil the requirements of permanent affiliation [2 (F)] and the eligibility to receive the grants [12(B)].

Situations such as these call for the best in the Principals and they are compelled to explore the uncharted avenues to help augment the resources. Of the many possibilities, the raising of voluntary donations from the students/parents comes handy. As it cannot be done openly, it has to take the garb of developmental fund and the like. While the professional colleges have had their field day this way, the colleges of general education cannot bank on it as a sure remedy, barring the prestigious few in urban agglomerations and metropolitan cities. The formula rarely works in the rural sector. The system of capitation of self-financing institutions is yet to work its way in general education.

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Corpus Fund

To overcome such an eventuality, there is the felt need to create a Corpus Fund, by those who have a stake in the institution, especially by the well-paid teachers. Resource generation, like charity, must begin at home. There are instances when the members on the staff, both teaching and non-teaching including the ministerial, have donated even a month's salary, of course, in easy instalments ranging from 24 to 30 to help create the infrastructure. While it is not fair to expect repeat performance of this nature, they could as well contribute in a gainful manner to help augment resources needed for the institutions. If the housewives of a residential locality in a city can run institutions, why not the teachers themselves? The moot point is whether a teacher so nobly conceived is thus to degenerate to the level of shareholder in a company. The corpus thus created can be operationalised more or less as a revolving fund.

Education Development Corporation

The government honouring only the commitment of paying the salaries, can these institutions ever turn the corner and dream of becoming viable? The well paid faculty of the ill fated colleges — does the description sound as a contradiction in terms? The faculty has a life time interest in the institutions that give them support and succour. It is imperative that they respond in a positive way to help pump resources in the resource-starved systems. There is a suggestion that even the government may float an Education Development Corporation or Bank with the members on the staff contributing to its share capital with a matching outlay from the government. A project of this nature may invite the harsh criticism of commercialising what otherwise is the noble profession of teaching.

System of Incentives

Contributions from the members of the staff thus to flow into the capital assets should have, in addition to security, a fairly good growth rate so as to result in rewarding returns on retirement, besides the normal terminal benefits. Remittances towards these funds may be granted exemption from income tax as are admissible to specified saving schemes. Thus can the government get the involvement of and complementarity from its staff in an otherwise onesided effort of grants and subsidies. The exemption from the personal income tax granted to voluntary contributions made to the universities should as well be extended to colleges too.

Activating the College Development Council (CDC)

The universities on the grant of fresh affiliation to new colleges and new courses collect huge sums towards affiliation fund and retain them *ad infinitum*, parting only with interest every year after deducting the handling charges. These funds have run into crores. The university can retain these funds so as to keep a watch on the stability of the newly sprung institutions for a lock-in period of 5-6 years investing them profitably and refund the initially collected amount after the said period of 5-6 years retaining the equal share with it. This could become the seed money to develop Colleges Development Fund. The university through its inspecting committees can assess the needs and recommend to the relevant authorities to release a proportionate share to the needy institutions. There is a need to make the CDCs fully operational and an independent Dean of Collegiate Education, as already existing in some states like Andhra Pradesh, may be appointed to monitor the development of the colleges.

User Agencies of the Trained Manpower

Since donations, education cess, soft loans from the banks and scholarships have not sized themselves upto the needs of financing educational effort, the NPE-1986 has suggested tapping of the user agencies like the industries and the other sectors of employment. Dr. D. Swaminadhan of the Planning Commission has suggested an Education-Industry Link-Up Module. These measures have remained non-operational as pious formulae on the paper. Maybe, they are workable in some select R & D institutions. But in general education, they are not likely to take off.

Two-Tier System

Since the aided institutions cannot meet the growing demand due to the resource crunch, a two-tier system, now working in technical education, may come to stay in due course of time. As a result, some courses/sections will be aided, some unaided but assisted by the Corpus Fund generated by the members on the staff, with a modified structure of fees, out of the purview of the government's stipulation on reservations. This dual system may prove to be more efficient in terms of the cost-benefit analysis. This may ultimately lead to privatisation of education as the government alone cannot meet the rising demand.

This alternate system may have to answer many a point of criticism from the students. Accustomed as they are to an age old fee structure, the question that is asked: 'Can they pay a boosted fee structure?' They are habituated to many concessions and exemptions through fake income declarations and false caste certificates. At the same time there can be no gainsaying of the fact that they are ready to pay the exorbitant fees for private tuitions and coaching classes. Services offered *gratis* may blunt the edge of competition. But a premium on them makes the competitive edge more sharp. It devolves on self-managed colleges that the delivery system has efficiency to obviate the need on the part of the clientele to be driven to coaching and tuition classes. The faculty has to be responsive and responsible to the needs of its customers. Those working in the aided category have grown apathetic and indifferent, not able to see the hand that pays, namely, of the state, the paymaster, which otherwise should have wielded the punitive rod. A healthy competition between the two systems may awaken the voice of accountability.

Contract Appointments

Yet another issue that needs to be examined is whether appointments in higher education, both at the PG and UG levels, could be made on contractual basis with in-built perks and benefits. The existing hierarchy top-heavy with time bound promotions suffers from inbreeding. The aim is not to go in for a policy of hiring and firing, but to ensure academic excellence with mobility. On our campus there is enough of the deadwood and the live wires are nowhere to be found. We have more often earned the encomiums as receiving full-time wages for the part-time job and that too not done well ! Prof. Amrik Singh calls time spent in colleges as baby-sitting years !

Cost Recovery from the Primary Beneficiaries

The Robins Committee on Higher Education in England has categorically established that the cost of education should be recovered from the primary beneficiaries, namely, the students in the form of fees. The secondary beneficiary may be the community or the user agency which is not likely to respond in a positive manner. Besides, there is the social cost in respect of those who had all along been denied the benefits of education from the point of view of equity, equality of opportunity with more chances of not merely of access but success as well. In the countryside, there is the opportunity cost compensation too, in weaning away the children from the marginal employment by making good the loss to the family income. Conditions being what they are, the undeniable fact is : pay one must.

Higher education in India does not present a pleasant picture. Shri Jayaprakash Narayan had to finance his education in the States by working in a restaurant. Those who went through the mill of earning and learning are now doing exceedingly well. There could be multiple entry points to education interspersed with periods of work. Of late, the Open University System and the Distance Education schemes encouraging the accumulation of credits at a leisurely pace, bid fair to take the load off the formal system.

Education — an Investment

In the sectoral allocation of resources, it is difficult to see education purely as an investment as the gestation period is bound to be too long. In a developing economy, education is more a social service sector or a development sector banking upon residual resources only next to the productive sector. Despite education figuring in the Concurrent List after the Amendment of 1976, it is more a state responsibility and the role of the centre is only marginal. Allocations to education to come closer to 6% of the GNP is still a dream. Hence the NPE-1986 warns that the deleterious consequences of non-investment are bound to be very serious.

The Need for Networking

Defined as the development of the human resources, education can cut across half a dozen ministries or departments like Child Care, Literacy, Adult Education, Population Education, health and hygiene and sanitation. The contributory share from these coordinating ministries through pooling and networking may help increase the size of the educational cake. As of now, there is a greater degree of duplication of effort in many of the educational schemes without the full involvement of the manpower in education department to give the semblance of the multi pronged approach. The third component of higher education besides teaching and research, is extension, which is still to receive content and meaning in many of our universities barring the lone experiment in Gujarat at the initiative of Dr Ramlal Parikh. Many of our top brass educationists fight shy of such schemes. It is only inspirational leadership that can impart momentum. It is disheartening to see schemes of literacy entrusted to municipalities and tax-collecting agencies ignoring the vast student power with their potential for service.

About 88% of student population at higher education level is in colleges and the universities hold only 9.5% of them. If this manpower can be motivated,

(*Contd. on page 11*)

Professional Development of Teachers

The Delhi University Model

N.K. Uberoi*

The only teachers who require formal professional qualification before they are employed are those who teach in primary and secondary schools. Lecturers in colleges and universities need no professional qualification. This situation obtains almost all over the world. There are hardly any pre-service courses for teachers in tertiary education and wherever they exist they are given to teaching assistants who are already in Higher Education (HE) System. But in-service training has now come to be recognized as a significant step in the evolution of education. Essentially this training includes short term courses (mandatory or voluntary) and include an orientation to teaching profession, development or sharpening of instructional skills, classroom or institutional management and subject updating. These courses follow a variety of patterns. In UK, they vary from three days to two weeks courses and emphasis is on teaching and examination techniques. In Sweden and Germany, new teachers work more or less as apprentices under the experienced teachers besides participating in pedagogical courses. In USA, the introductory training is such that participants learn more from each other than from the experts (resource persons). It seems, that all over the world the need for in-service training of tertiary teachers is strongly felt by the educational planners and therefore, various models practised in different countries are being refined further. This trend would ultimately lead to formulation of some kind of valid theory of HE.

In India, as a result of efforts of Prof. J.N. Kapur and others, a sort of Refresher Courses in mathematics for the teachers of the colleges were started at Delhi University in 1950s. This activity was limited to one place. It was followed by summer schools for college and school teachers organized with the assistance from National Science Foundation (NSF) of USA, UGC and NCERT. Again, these programmes remained confined to a few disciplines and a few universities. There was no provision or exposure to pedagogical skills in these programmes. These programmes were discontinued after 1963.

Confronted with declining standards, due primarily to expansion in Indian HE system, the question of quality assurance became critical. One factor that has been identified to improve the standards relates to teachers' education. The document on Plan of Action — National Policy of Education (1986) emphasizes that "it is proposed to organize especially designed orientation programmes in teaching methodologies, pedagogy, educational psychology, etc for all new entrants at the level of lecturers ..... and to organize Refresher Courses for serving teachers to cover every teacher at least once in five years". As a consequence, the UGC introduced a centrally funded scheme of Academic Staff Colleges (ASCs) in 1987. Thus 48 Academic Staff Colleges (ASCs) were started within the university system in various parts of the country. The ASCs have been functioning since 1987-88 and have enabled approximately one hundred thousand teachers to participate in their programmes of Orientation and Refresher Courses. These courses of 3-4 weeks duration are generally in modular form and are mandatory for promotion of college/university teachers. The orientation courses sensitize the participants in areas like societal context of HE, methodology of teaching, management issues, psychology, environment and distance education. The Refresher Courses are discipline based and are conducted in collaboration with the respective departments of the universities. The scheme of ASCs is regularly monitored by the UGC. For further details about the functioning of the ASCs, readers may refer to reviews that appear in *University News* from time to time.

Delhi University

In 1987, as in case of other universities, the UGC asked the University of Delhi to set up an Academic Staff College. The University of Delhi after examining the proposal of the UGC sent a counter proposal for setting up a Centre for Professional Development in Higher Education with a different pattern of staffing and functioning to achieve not only the objectives of faculty rejuvenation as outlined in the UGC proposal but also to understand and accomplish the broad aims of HE system in India. The proposal for setting up such a Centre was framed within the framework of the

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ethos of Delhi University which has the distinction of having a large faculty with a high degree of academic capabilities. The university has nuclei of scholars in many departments with academic achievements of significance. It has a number of Advance Centres, Centres of Special Assistance and of research projects along the frontiers of knowledge. Its intellectual resources are rich and have a potential for augmentation from other centres of higher learning in the city and elsewhere. The university was therefore, having a right climate for launching a scheme of professional development in HE in a unique manner.

CPDHE Model

The UGC accepted the proposal of Delhi University to start a Centre for Professional Development in Higher Education (CPDHE). The CPDHE started functioning in 1988. The philosophy of the CPDHE is, *firstly*, that a programme of faculty development/improvement/upgradation/updating is an activity in which teacher's involvement at every stage of programme development is essential. *Secondly*, a teacher has to realize that he functions within the ambit of the institution in which he is working. The institutional aims have to be decided by the institution and clearly spelt out to the faculty and these aims should broadly conform to the aims of HE. Therefore, a right step in professional development is to reinforce a culture that demands functioning of teachers towards realization of well thought out and well defined institutional objectives. The various programmes of the CPDHE are directed towards the implementation of the above philosophy. The programmes emphasize the concept that the best professional development of a teacher is the self development; hence mastery of knowledge of his discipline, his ability to transmit the knowledge effectively, and his ability to develop a concern for students and to inspire them must be developed by self efforts. The Centre conducts Orientation Courses for newly inducted lecturers of the colleges and the university departments. The contents of these courses include sensitization of the teacher participants to the philosophy of HE and its societal context, equity issues, environmental issues, adolescent psychology, institutional management, pedagogy, evaluation, distance education, micro-teaching and other topics essential in understanding the complexities of higher education.

The Refresher Courses are discipline based and are conducted with the expertise of the concerned department(s) of the university and that of resources of dozens of institutions of the city viz.: five universities of Delhi, IIT, NIEPA, NCERT, AIIMS, IARI, NPL, DRDO, Institute of Chartered Accountants, IIPA, Indian Institute of Environment Education, AIU, FICCI, AICTE, UGC, Planning Commission and others. The experts also include the former Vice Chancellors and other educationists of repute residing in Delhi. They make a significant contribution towards the success of Orientation and Refresher Courses. At times we have had Refresher Courses in certain areas being conducted exclusively by experts from abroad. All the ASCs in the country are making their best efforts in making their Orientation and Refresher Courses successful. But the success is limited.

The effect of the exposure of the participants to the courses does help them in enlarging their horizon and energises them intellectually. But an improvement in undergraduate teaching, which was the objective of the faculty development programme is not visible. The CPDHE could analyse the reasons for this. The reasons are: (i) a three or four week in-service course cannot be a substitute for continuing education programme; and (ii) the climate and the ethos that exist in the colleges/institutions which have deputed teachers for participation in Orientation and Refresher Courses provide no encouragement for them to be more effective or innovative. It is the infrastructure, the resources and the most important, an attitude, the commitment and the understanding of the Head of the institution that constitute the ethos. The Principal of the college has to realize that an enlightened and professionally sound faculty is an asset to the institution and ultimately he has to be a partner in the professional development programme of teachers and not a spectator. In fact, at times the Head of the institution, does not favour teachers being deputed for Orientation or Refresher Courses during the time when classes are in session. The CPDHE has devised a new model which is now in operation for the last one year. The model is based on the principle that teacher's education is a continuous process. The Centre, therefore, conducts Orientation Course that is located in the college having the Principal and another senior teacher as coordinators. The sessions are held either once a week or fortnight in the afternoons when the teacher participants have finished their teaching work in their college. A suitable reading material is provided prior to the sessions. The resource persons are deputed by the CPDHE to interact with the participants. The contents of the course are basically the same as those followed at the Centre with variations introduced in consultation with the participants and coordinators keeping in view the requirements of the college. The participants are involved in writing a project or report about any contemporary issue of HE.

The course extends almost to entire academic year. The positive impact of the course is already visible. The Principal of the college has become involved in the faculty development programme and is now in a position to appreciate and encourage efforts of the faculty for improving teaching-learning process.

CPDHE's Outreach as a Consulting Agency

The National Education Policy, and other agencies concerned with policies regarding HE have always been recommending that universities should develop the concept of sharing of facilities and knowledge among themselves. Based on this concept, the CPDHE has developed a faculty development programme for college teachers involved in science teaching. The University of Delhi has been engaged in a project of Low-cost Instrumentation under the supervision of Prof. K.V. Sane of the Chemistry Department for more than a decade. The project under the sponsorship of DST, UGC, UNESCO and IUPAAC has developed a technology for fabrication of Low-cost instruments meant for use in undergraduate teaching by using locally available components. Such a technology is the need of the day, not only for developing countries but also for the developed countries. We have developed a teacher training programme in the fabrication of Low-cost Instrumentation in the form of workshops in which participants learn to fabricate the instruments and take the instruments fabricated by them to their institution for use. A large number of such workshops have been conducted by Delhi University experts all over the world. The CPDHE has taken up the faculty development programme on the Fabrication of Low-cost Instrumentation in partnership with the various science colleges of the country by conducting workshops at the doorstep of the cluster of participating colleges in different states. Two science teachers from each college of a state are selected to participate in this programme. They constitute a core group. The core groups are invited to CPDHE for an advanced training; in this way they become the trainers or resource persons for the rest of the teachers of their own college and the other colleges of the state — a multiplier effect. In one of the largest states of India, Madhya Pradesh, all the science colleges have been covered under this programme. The next step that has already been initiated is the change of the laboratory curriculum of the undergraduate courses so that new curriculum is built around the low-cost instruments fabricated at the institution. This is going to result in a gradual change of culture in laboratory work. The CPDHE has since been appointed as the *Consulting Agency* for the state of Madhya Pradesh. The work in the state of Rajasthan is nearing completion. All the science colleges would be covered in a few months. Many other states are now under the CPDHE's national network of this project. The CPDHE gives top priority to linking up R and D with training and sharing of technology.

CPDHE's Extension Programme

It is our considered view that an institution like CPDHE should be involved with the community within its catchment area. Three years ago, the Centre started an Orientation Course on Energy and Environment, conducting one course every year with a batch of 40 university teachers. Alongside, one semester course on Environment Education for undergraduate students drawn from different colleges was started. A batch of students have successfully completed the course last year — thanks to the financial assistance from the Ministry of Environment and Forests, Government of India. The idea of conducting a certificate course for students was to let the students work on short projects in the community relating to Energy and Environment problems, for example, survey of fuel used for cooking, etc. The Centre is negotiating with the colleges having strong and functional NSS units so that our extension work can be launched in full swing with their cooperation.

Preparing Faculty to Cope with the Changing Syllabi

Change of syllabi has lately become a very vigorous process. Many faculties are listed on the agenda of the Academic Council of Delhi University for approval of their revised Syllabi. The CPDHE has thus thought it appropriate to run courses for the teachers with focus on revised syllabi so that they are prepared to handle the classes more effectively. The programme of conducting courses in Energy and Environment education proved to be a boon because as a result of the decision of the Supreme Court, the colleges would be introducing environment education for undergraduates for which a large number of teachers would have to be prepared to teach this subject. The CPDHE could not have conducted this programme without a generous grant from various sources.

Research Unit

Having resources, infrastructure and expertise, the CPDHE has launched research projects that embrace wide range of problems confronting HE system. A very interesting project on the "Impact Studies of in-service courses (Orientation and Refresher) for the lecturers of the colleges" has been undertaken jointly by the Faculty of Management and the CPDHE under Ph.D. programme. The thesis by the student would soon be ready to throw light on certain aspects of professional development of teachers. It is time that we develop a theory of HE in Indian context. Hopefully, the research unit of the CPDHE would be able to make a significant contribution in this regard. At the request of the UGC our research unit has also undertaken another project on preparation of Reading Materials to be used by all the ASCs of India for their Orientation Courses. The first volume is ready to be despatched to all the ASCs.

Short Courses/Seminars/Workshops

The university and the teachers expect that CPDHE must attend to contemporary and burning issues of HE. It should not only act as consulting agency for the states but also articulate policies and directions for the federal government and its agencies.

With assistance from UNESCO, Commonwealth of Learning (Canada), United States Agencies, Ministry of Environment and Forests and our own resources, the CPDHE has been organizing conferences/workshops of Directors of ASCs, Principals of colleges and the Vice Chancellors of Indian universities on subjects like Professional Development of University Teachers through Distance Mode, Evaluation and Quality Assurance in Higher Education, Role of Chemistry in Environment, Enviro-legal strategy and Financing of Higher Education. These programmes are conducted with the help of both national and international experts. The recommendations of these conferences are sent to the appropriate authorities for their perusal.

International Collaboration

In today's world no country can afford to remain unaware about the latest in every aspect of developmental activity including Education. There is a paradigm shift in economy in terms of liberalization, globalization and privatization and concurrent changes in approach to HE. It is very essential that the CPDHE understands this paradigm shift and relates to the countries which already have liberal and open economy. Thus we have signed MoU and have established links with the universities abroad, in UK and USA for a meaningful exchange of expertise on reciprocal basis in the area of professional development — a CPDHE model — and University-Industry interaction as it obtains in UK and Puerto Rico.

Finally, the CPDHE has the potential to become International Institute for Professional Development and Research in Higher Learning. Some of its programmes can not only be replicated at ASCs in India but also at the universities abroad.

Generating Resources for the Colleges

(Contd. from page 7)

mountains can be moved and miracles can happen. Our colleges are not only ill managed but under managed. Colleges can adopt schools, as schools can primaries, as in the School Complex schemes. The new wave of liberalisation will do away with controls and restrictions. A modicum of autonomy may give the freedom to imaginatively restructure the schemes. It is time we identify our needs and settle our priorities, taking cognisance of demand and supply. Thus can education give as much as it can receive from the allied ministries through a sound system of co-ordination, pooling and networking, fulfilling the major thrust areas of relevance and practicality.

Financial Management

Financial management (FM) demands a prudence to tighten full grip over patterns of expending, from indent to inventory control, if one is not to indulge in reckless squandering of the scarce resources. The provision to utilise 10% of the aggregate of the salary component from the annual budgets towards contingencies and consumables, fixtures and fittings, and equipment is the barest minimum of additional resources one can lay ones hands on. The unspent balances from the other heads of account barring Scholarships are to be remitted soon after the financial year into the Joint Account of Salaries, which is the prime responsibility of the department. The transfer of the unutilised funds to the Principal's Account without any corresponding reduction in the grants with the permission to use them to strengthen the infrastructure would give the much needed leeway thus bringing relief. Straining every nerve in financial management would necessarily imply a cut in the contingencies, the liquidation of the unutilised capital and a circumspection that contributes to 'creative frugalities'. Trickles they may appear to begin with, such marginal savings bid fair to develop into deluges.

Thus a deft handling of the finances would pave the way for the creation of wealth so vitally needed for the welfare of the institutions.

Criteria for Excellence for Educational Administrators

J.N. Kapur*

Introduction

This is a companion article to my four articles on Criteria for Excellence in learning, teaching, research and for departments published in *University News*.[1-4] Apart from students, teachers and researchers, the educational administrators (heads of departments, principals, registrars, vice-chancellors, directors of education, ministers of education, chancellors) play a critical role in any higher educational system and their motivation and good performance are essential for the excellence of the educational system. We give below some leading questions for each class of these administrators whose answers will determine the health of the educational system they administer.

Some Questions for Heads of Departments

Some criteria for excellence of departments were suggested in an earlier papers. If the performance on each criterion is rated on the scale of 1-5, what is the score of your department on each criterion? How does each student and each faculty member of your department perform on the criteria for excellence in learning, teaching and research[1-3] and what steps have you taken to motivate each group to improve its performance?

Are all classes being taken regularly and are all courses being covered fully and in depth? Is there any tendency in the case of internal assessment not to teach the full course and if so how do you overcome it?

Are all your faculty members doing research? Are they publishing papers in good journals? How many of them have won national and international recognition? Do you provide encouragement to all good teachers and good researchers in your department, or do you treat everybody in the same manner independently of his or her performance?

Do you have regular weekly seminars in your department? Do faculty members from other departments and other universities come to give seminars and interact with your students and faculty members?

What steps do you take to encourage your faculty members to get research grants from various funding agencies? Do you take steps to get COSIST and DSA assistance from the UGC for your department? Do you work in such a manner that your department deserves such assistance in the near future?

What steps do you take to encourage your teachers to participate in national and international conferences and symposia or to give lectures in other departments, universities and refresher courses?

Do you consider your headship an opportunity to advance your personal interests, to oblige friends and supporters, to build up influence bases or even to take revenge for harm done to you by earlier heads of departments or do you think that headship is an opportunity for serving the interests of the department and to take it to greater heights of excellence? Do you take pride in only your personal achievements or do you take pride in the achievements of every member of your department and in the strength and reputation of your department?

Do you allow your headship duties to interfere with your normal teaching and research work or do you think of headship as an additional responsibility for which you are ready to put in extra work? If you cannot do your research work as well as before because of the headship of your department, do you miss it and do you wish to go back to your academic work with full vigour after you have done your present assignment? Do you feel the loss of your research is made up by the help that you provide to others to do better research or is it compensated by the power that you enjoy as the head of the department.

Some Questions for Principals

Do you think your main job is to somehow keep peace in college or is it to create the academic climate in which every student and every teacher is motivated to put in his or her best for learning and teaching? Do you consider principalship as a position of power or of service?

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Do you wish to be really proud of the great institution you can possibly build or do you think that since building up great institutions is the dream of idealists, you can better use your position to build up your importance? When you take any decision, do you always take it in the interest of the institution or is sometimes your personal interest a major consideration?

Are you perfectly fair in your admissions, appointments and promotions or do you have two standards of fairness, one for those with power and influence and the other for those who do not have these?

Do you yield to pressures in admissions and appointments or do you tell powerful people who try to pressurise you that you cannot do anything which is not in the long-term interest of students, teachers and the institution you have the privilege to serve?

Do you always encourage good students and good teachers against unscrupulous student leaders and politically supported teachers who do not do their duty? Do you believe in the sacredness of your mission so strongly that you can fight all the evil influences in your environment?

Do you ensure that all classes are taken regularly and students are motivated to attend classes? Do you encourage the activities of all students cultural and academic societies? Do you take initiative in seeing that these societies work regularly? Do you provide enough sports facilities and encouragement to good sportsmen? Do you have well-equipped and well-utilised libraries and laboratories? Do you invite enough first rate scholars and men of excellent character and dedication to come and interact with your students and teachers?

Do you encourage your teachers in their scholarly activities and in their research, in participation in conferences and symposia and in the activities of professional bodies or do you discourage your teachers for doing research even if they are prepared to do their teaching work honestly?

Have you completely identified yourself with your institution and are you always thinking of making it a better and better college every day and fighting with all your strength all the vested interests which want to come in the way of your realising the vision of an ideal college?

Are you aware that everybody in your institution looks up to you for upholding highest ethical and moral values and even a slight wavering or compromise on your part may do tremendous harm to your organization and everybody associated with it?

Some Questions for Vice-Chancellors

Have you got a great vision for your university? Does it include excellence for academic, moral and ethical values? Do you feel you can inspire everybody in educational system with your dedication and your example and are you providing a direction to the university? Do you realise that if you yield to pressures, everybody else will and if you value excellence in learning, teaching, research and administration, everybody will follow your example? Do you realise that your preaching high values is not enough, you have to practise what you preach?

Are you able to get large grants for your university from the UGC, other government agencies and research funding agencies? Are you able to motivate the public to give grants to the university and take other steps to increase the financial resources at the disposal of the university without any compromise with ethical, moral and academic standards?

Do you realise that you are not an individual only, but you represent a big organization and your honour and prestige can contribute a great deal to the honour and prestige of the organization?

Do you get all support from chancellor, chief minister, education minister and members of your executive and academic councils and do you work with such fairness that nobody even dares to ask you for undue favours? Do you impress on everybody the need for keeping the interest of the university uppermost?

Some Questions for Registrars and Finance Officers

Are you running the university administration with perfect efficiency, fairness and without corruption? Are you able to provide a leadership to all classes of staff in your office and inspire them with a sense of duty? Are you able to ensure conduct of examinations and declaration of results in time ? Have you been able to eliminate the evils of copying in the examination system? Do you and your officers treat all students and teachers and members of public with courtesy or you allow some members of staff to unduly harass students and others? Do you ensure that all regulations and statutes of the university are fully followed? Do you always give honest advice to your vice-chancellor or do you give him advice which he may like? Do you have a stake in the reputation of the university?

As a finance officer, do you see that there is no wastage of funds in the university and every paisa is spent in an optimal manner? Do you, as a finance officer, interpret rules so as to facilitate or hinder academic work in the university?

Do you as an employee of the university feel as belonging to the university and as a person who shares the good or bad reputation of the university? Do you do your own duty honestly without worrying about what others are doing and do you treat everyone who comes in contact with you with all courtesy and with a desire to help? Do you want to please your bosses with hard work or with sycophancy?

Some Questions for College Managements

The college was possibly founded by some patriotic citizens including some of your ancestors with a high sense of duty and service. Are you keeping the goals of the founders in view and are you continuing to work in the same spirit of service or do you think that being a member of management gives you a position of power which you have a right to exploit for your personal benefit? Do you try to influence admissions and appointments and even purchases and contracts in favour of your friends and supporters or do you decide all these questions in the sole interest of the institution which you are managing? In fact do you fight others who try to exploit the institution in their own interest? Do you give all support to good principals and good teachers or do you support only obliging principals and obliging teachers?

Are you interested in improving the academic, cultural and sports standards of the college and do you want to be proud of being the member of management of a college which enjoys high reputation in the academic world? Are you prepared to take strong action against any employee, teacher or principal who works against the interest of the college or brings a bad name to the college, even if this person happens to be your relative or the relative of your friend or your close supporter in business or politics? In general, do you give prime importance to the interest of the college when you take decisions regarding your college?

Some Questions for Education Ministers, Chief Ministers, and Chancellors

Do you nominate your nominees on the selection committees for vice-chancellor's position, persons of exceptional integrity with deep interest in higher education or do you nominate persons who are likely to act according to your explicit or implicit wishes? Do you instruct them to select persons in the best interests of the universities? Do you forward names for vice-chancellorship suggested by your friends and supporters to this selection committee through your nominees?

Out of the panels you receive, do you select the persons who according to your best judgement will be best for the universities or do you take your own political, caste, social and friendship interests into account?

After you have selected a vice-chancellor, do you give him your full support and tell him in no uncertain terms that you expect from him a clean administration and perfect fairness and that you will hold him accountable for raising the standards of education in the university?

Do you or your private secretaries forward any cases for favourable consideration to the vice-chancellors?

Are you convinced in your heart that excellent higher education is vital for the development of your state and the country or do you think that any kind of higher education will serve the interests of the state? Do you believe in only quantitative expansion of higher education or do you also believe that our universities should compare and compete with the best in the world? Is higher education only a means of securing social justice or is it also an important means to make our youth and the country internationally competitive?

Do you ever get the performance of your universities and institutions of higher learning assessed by independent agencies? Do you see that all students whose education is highly subsidised by your government, seriously study and do not waste their time? Are you prepared to ensure that all teachers who receive their salaries from the government exchequer do not neglect their teaching duties and do not spend most of their time in tuitions? Are you prepared to help the universities in eliminating the evil of copying in the examinations so that all students are prepared to study hard?

Do you think that university professors can give you useful unbiased advice in framing your policies, just as they do in other countries or do you believe that they can serve no useful purpose? Do you respect the best teachers and best researchers in your state and attempt to give them a due place in society or do you feel in your heart that any teacher and any vice-chancellor is inferior to an IAS officer? Do you support professional student leaders (who are not really students) and professional teacher politicians (who are not really teachers) against the university authorities? Are you prepared to ask your political supporters not to make us of students in fighting their political battles? Are you prepared to join with other political parties in stopping political interference in universities?

Do you believe that the main function of the universities is to train future leaders for political parties or do you believe that the main function is to train first rate economists, scientists, engineers, business managers, administrators and scholars?

The Glory of Sanskrit Literature

Shri Pranab Mukherjee, Minister for External Affairs and Deputy Chairman, Planning Commission, Government of India, delivered the Convocation Address at the first convocation of the Raashtriya Sanskrit Vidyapeetha (Deemed University), Tirupati. He said, "Sanskrit Literature projects Truth as the greatest element, and says that all virtues like love and sympathy, compassion and forgiveness, devotion and renunciation spring from attachment to this supreme principle of Truth, which constitutes the foundation of the entire creation." And added, "In its endeavour to convert the mortal plane into a heavenly abode Sanskrit Literature presents the idea that all men should speak alike, should think alike and should know the hearts of one another, so that ideal of One humanity, One nation can be brought into consummation." Excerpts

We are witnessing rapid technological advancements and its impact has percolated down into our ways of living and thinking. Young scholars should appreciate the ground realities and put their efforts to rejuvenate Indian values and culture, and so that their contribution in the reconstruction of social system and maintaining good values of life and morals can be realised and translated into welfare of all in the basic spirit of "सर्वे भवन्तु सुखिनः" (Let all be happy). Pursuit of happiness (Ananda) has been the Indian goal since times immemorial.

The Sanskrit literature, beginning from the Rgveda down to contemporary Sanskrit Prose and Poetry has established itself as vast repository of wisdom and values — as the source of the stream of spirituality has provided strength and vitality through Indian as well as Asian Culture. Most modern Sanskrit writers have drawn deeply in their creative writings from Indian traditions of spiritual knowledge. The Sanskrit language in itself is pure: it stimulates the mind and takes it to higher intellectualism : its touch transforms the total personality and effects spiritual rejuvenation of the man. This is probably the reason for maintenance of proper academic atmosphere in Sanskrit Universities. Campus unrest, students' strike, cease-work of teachers and agitation launched by members of the non-teaching staff have become present day's regular features of general universities, while Sanskrit Universities not only carry out their on-going prog-rammes systematically and quietly, but are expanding their areas of activities.

No Literature other than that of Sanskrit has been able to demonstrate such richness of thought and magnificence of ideas as has been projected by Sanskrit literature. This literature has sung the glory of humanity by declaring that, Man is the greatest of all beings and has claimed that all members of the universe are linked up with the man by bonds of love and affection.

न मानुषात् श्रेष्ठतरं हि किञ्चित्
एवं
वसुधैव कुटुम्बकम्

This Literature emphasises the necessity of cultivating divine qualities leading to expansion of ego-boundaries and suppressing demonical qualities which keep the man confined within the boundaries of truncated ego. Cultivation of divine qualities, Bhagawad Gita says, leads to expansion and consequential liberation, while that of demonical qualities lead to contraction and consequential bondage.

दैवीसम्पद्विमोक्षाय निबन्धायासुरी मता

Sanskrit Literature projects Truth as the greatest element, and says that all virtues like love and sympathy, compassion and forgiveness, devotion and renunciation spring from attachment to this supreme principle of Truth, which constitutes the foundation of the entire creation.

सर्वं सत्ये प्रतिष्ठितम्

In its endeavour to convert the mortal plane into a heavenly abode Sanskrit Literature presents the idea that all men should speak alike, should think alike and should know the hearts of one another, so that the ideal of One humanity, One nation can be brought into consummation.

We recognise the importance of studying Sanskrit in the national system of education. Sanskrit is not only a Classical language; it is a surviving and living tradition. The twentieth century has witnessed two world wars and sufferings of millions of men and women. As a result urgency and necessity for peace dawned on world leaders as it dawned on Asoka in the third century B.C. after the Kalinga War. The charter of the United Nations enjoins that "we the people of the United Nations determined to save succeeding generation from the scourge of war" and "since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed." Thousands of years ago the "*Yajurveda*" Hymn of Peace (*Shanti Patha*) elaborately talks of peace :

ॐ द्यौः शान्तिः, अन्तरिक्षँ शान्तिः, पृथिवी शान्तिः, आपः शान्तिः, ओषधयः शान्तिः, वनस्पतय शान्तिः, शान्तिरेव शान्तिः ।

It means, "Peace be unto heavens, peace be unto sky, peace be unto earth, peace be unto herbs, peace be unto the trees, peace be to the Ultimate (*Brahma*), let peace be to all. Let peace be to peace itself and let that peace be unto me." The message of peace in clearer terms is difficult to find and pronounce. It is all encompassing peace. A Sanskrit scholar is aware. This is a message not only for human beings, it is a message for ecology, for environment and all that goes along for global harmony, development and growth. This interdependence has been brought out beautifully.

It is unfortunate that learning of Sanskrit is conceived merely as learning of classical language by many. It is presumed by many that it contains literature which is religious, and philosophical and, therefore, learning of Sanskrit is supposed to be of limited value and even opposed to modern and scientific values. Nothing can be more fallacious than this kind of belief. Sanskrit literature is replete with knowledge in all-disciplines from human behaviour to mathematics, science, animal husbandry, astronomy, architecture and so on.

Sanskrit Literature is rich in scientific and technological speculations as well. Many of the modern scientific and technological discoveries owe their genesis to certain observations contained in the texts of Kanada. Mathematical Theories receive an amazing treatment in the hands of Bhaskaracharya. The Iron Pillar at Meharauli in the Qutab complex indicates the excellence reached in Metallurgy by the 5th Century A.D. Kautilya is most modern thinker in his approach and his *Arthasastra* is in a position to offer advice and guidance in diplomacy and statecraft.

Sanskrit learning, therefore, is very much relevant in the contemporary age. It is for the young graduates to analyse the treasures contained in Sanskrit in a scientific way so that the society can understand their utility and relevance for present and future generations and feel the urge to propagate Sanskrit learning and disseminate the message of this great language.

I understand this university has got some special features and has already started the exercise of synthesis between traditional knowledge and modern scientific knowledge, so that a scientific insight can be inculcated in the young learners, who can take justified pride in the rich cultural heritage of the nation. I have gathered from the Address delivered by His Excellency the President Dr. Shankar Dayal Sharma, at the Special Convocation organised at Rashtrapati Bhavan to confer on him the degree of 'Mahamahopadhyaya', that this temple of learning has all along tried to maintain its high standards and to produce scholarship of high excellence.

His Excellency the President of India was pleased to suggest that this 'Deemed University' should be converted into a full-fledged Central Sanskrit University so that it can create sufficient infrastructure for creating new knowledge in diverse branches of learning and produce suitable reading materials necessary for dissemination of the message of Sanskrit. I take great pleasure in repeating this suggestion made by His Excellency the President of India, who epitomises in him the tradition of Indian wisdom. I am sure the Ministry of Human Resource Development will take note of this important suggestion and will try to fulfil the same.

With this kind of development, Sanskrit would become vehicle of all learning, in all disciplines and compete with modern languages, in reach, in simplicity and making material available to its clientele so that on the grounds of past, grows 'the beautiful tree' of future progress and prosperity.

Making our future prosperous is the major challenge our country is facing today. The scholars of Sanskrit will have to realise and appreciate this challenge in a big measure. We know that all cultures and civilisations proceed forward. The stream of history cannot be made to flow back; it will have to be given direction for future so that the stream retains its basic strength, resilience and adaptability to modern needs and surroundings. Panegyrics and eulogy of past go only half way in conveying "Wonder that was India."

We have to make a new India, vibrant and strong, the citizens of which hold their heads high wherever they go and compete with citizens of other nations of the world on equal footing in various walks of life, including fast emerging frontiers of knowledge in the field of electronics, space, molecular biology, physical sciences and so on. These aspects of life, culture and society will have to be strengthened.

But how do we proceed. We have not been able to analyse all the literature of Sanskrit. I am told that even in the last decade of 20th Century, a large treasure of Sanskrit literature remains confined in manuscripts in the libraries. Such manuscripts numbering in several thousands, is with Varanasi Sanskrit University, Asiatic Society, Saraswati Mahal Library, Tanjore and at a host of other places. James

Prinsep deciphered *"Brahmi"*, for ourselves. We could know so much about our history and culture, the details of which were contained in the inscriptions and in the manuscripts.

I find that the number of scholars studying the manuscripts in the universities and at institutions editing manuscripts, publishing and translating them into the regional and modern languages are becoming scarce. This material may contain information regarding various subjects and sciences. The fund of knowledge contained in the vast bulk of literature of our rich language remains unavailable even to our own people. We will have to strive to learn what it contains.

Sanskrit is a precise and scientific language and can be used because of its precision for understanding any scientific and modern idea. Belonging to the Indo-European languages, Sanskrit occupies a unique position in the linguistic world, with us and also, rest of the world. This has been the vehicle for transmitting our traditions, cultures, values, philosophies and several aspects of life across time and countries. It has tremendous fund of wisdom and a source of inspiration.

It may not be out of place to refer that it has anticipated several modern ideas. The four Purusharthas (motivations) *Dharma*, *Artha*, *Karma* and *Moksha*, for example anticipate 'Maslow' several centuries before talking of basic needs, self-esteem and self-actualisation. I need not dilate before such a gathering on these aspects. You have studied this language and through it, the various subjects and disciplines. Let your understanding be integrated with the needs of modern times so that our country and society progress along with welfare of all the people.

SANJAY GANDHI POST GRADUATE
INSTITUTE OF MEDICAL SCIENCES
RAEBARELI ROAD, LUCKNOW
[illegible]

REQUIRES

Persons looking for challenging opportunity of being a part of Super Speciality apex tertiary health care organisation.

01. EXECUTIVE REGISTRAR : 01 Post.
Pay Scale : 2050-2500 (Un-revised) **Age** : Maximum Age : 50 Years.
QUALIFICATION & EXPERIENCE : First Class Master Degree, preferably in Science from a recognised University. Ph.D. may be preferred. 15 Years experience in academic administrative job including conducting examination in an University or Post Graduate Institute of National level or equivalent. Preference to those having knowledge of academic procedures formulation of syllabi according to Indian Medical Council's regulations.

02. ASSISTANT REGISTRAR : 2 Posts (1 SC)
Pay Scale : Rs. 2000-3500 **Age** : Maximum Age : 40 years.
QUALIFICATION & EXPERIENCE : First or High Second Class Post Graduate degree, preferably in Science subjects with 5 years experience in Administration, preferably in an University/Research organisation. Desirable Ph.D.

03. SENIOR PERSONNEL OFFICER : 01 Post.
Pay Scale : Rs. 3000-4500
Maximum Age : 40 years
QUALIFICATION & EXPERIENCE : High Second Class (55% and above) Post Graduate Degree + 10 years experience in Administration in Govt/Semi Govt. organisation or Post Graduate Degree in Business Administration with specialisation in Personnel Management & Industrial relation with 7 years experience in Administrative capacity in Govt. or Semi Govt. organisation.

04. ASSISTANT ESTATE OFFICER : 01 Post
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Maximum Age : 40 Years
QUALIFICATION & EXPERIENCE : Post Graduate (55% and above) with 5 Years experience in property management at a supervisory level in a large organisation or undertaking.

05. LAW OFFICER : 01 Post.
Pay Scale : 850-1720 (Un-revised, likely to be revised to Rs. 2000-3500)
Maximum Age : 40 Years.
QUALIFICATION & EXPERIENCE : Graduate with First Class Degree in Law with 5 years practicing experience in atleast in Distt. Court. Preference will be given to those having Administrative Law as their specialisation and practicing experience of handling Labour Law matters.

Apply with detailed resume alongwith selfattested certificate and testimonials and one passport size photograph to the **Director, SGPGI, Raebareli Road, Lucknow - 226014 (U.P.)** alongwith Bank Draft of Rs. 100/- for Sl. No. 1 and Sl. No. 3 for Rs. 50/- in case of general candidate & for **Rs. 35/-** for SC candidates for other posts in **favour of the Director, SGPGI Lucknow. Last date for receiving application is 15th Sept., 1995.** Appointment on deputation may be considered.

Advt. No. 25/95-96 **DIRECTOR**

Synergy Groups Meet

Human Resource Development Minister Mr Madhavrao Scindia ruled out privatisation of education in India. He was presiding over the first meeting of the Synergy Groups on education held in New Delhi recently. He said the Government had no plans to privatise any institution under its charge.

Mr Scindia also reiterated the Government's commitment to increasing allocation for education to six per cent of the GDP by the turn of the century, increasing allocation to education to Rs 80,000 crore as against the Rs 28,000 crore being spent at present both by the states and the Centre.

He made it clear that private initiative was being sought only for additional funding. He revealed that the guidelines for private universities received from the UGC were now under consideration at the Ministry. Cautioning against crass commercialisation of education, he called for ensuring quality in education and provision for scholarships for the needy students.

Mr Scindia emphasised the need for a consensus approach on education. He said it was necessary to hasten slowly, otherwise it can cause incalculable harm. He informed the meeting that in addition to synergy groups, the Ministry proposed to organise 12 seminars in the coming months in all parts of the country to discuss threadbare the issues of lightening the school burden, reform of the examination system and value education.

He impressed upon synergy groups to come out with sharply focused action programmes. He said there was need for prioritising, keeping in view the vast canvas of the subject. The system of open education should be closely examined, exploring the possibility of an educational TV channel.

The participants were of the viewpoint that the formation of such synergy groups would pave the way for meaningful interaction among planners, the executors and the beneficiaries. They described education as one of the most critical inputs of development, particularly in the changed economy. Participants also emphasised on vocational education.

It may be recalled that Synergy Groups on education had been constituted by the Minister last month to make the system more effective. Consisting of noted academicians, officials and captains of the industry, specific synergy groups would look into major thrust areas in education, including primary education and literacy, vocational education, IITs and IIMs.

New Method of Fingerprint Development

Researchers at Delhi University have poineered a new technique to develop high-quality latent fingerprints on documents in just two minutes. They are planning to file a patent for the new method which exploits the presence of calcium ions in sweat. A special kind of catalyst called a 'phase transfer catalyst' is used to selectively stain the calcium ions and make the fingerprints visible.

Forensic scientists who have seen the prints developed by fixing calcium say they are of good quality, and clearly show the characteristics of ridges, the circular rings seen on fingerprints.

The method is claimed to be superior to the common technique of using charcoal powder to delineate the ridge pattern, which is suitable for only fresh fingerprints. Also charcoalbased patterns get destroyed by accidental rubbing or scratching.

The techniques available so far use reagents that stain salt, fatty acids or amino acids, which are also present in sweat. But each method has its drawback.

Although calcium forms a number of coloured complexes with reagents, which are useful in fingerprint detection, forensic scientists worldwide have encountered a major stumbling block in putting it to use.

The calcium ions in the deposited sweat immediately get converted into insoluble salts such as calcium oxide and calcium carbonate which do not react (or react extremely slowly with other reagents to be of any use).

The breakthrough by Dr G.S. Sodhi and Dr Jasgit Kaur of the Chemistry Department of Delhi University and Dr Surendra Nath of the Anthropology Department makes reactions possible with the insoluble inactive calcium salts.

The reaction is aided by the phase transfer catalyst that speeds up the reaction between substances in different phases, that normally do not react in this case, the catalyst accelerated reaction between the insoluble calcium salts and a dye solution.

This is the first time that such a catalyst has been used to develop fingerprints, the team said.

Tetra butyl ammonium iodide was used as the catalyst and the common dye eosin widely used as a stain in biological laboratories, in drugs and in cosmetics.

On dipping a paper with fingerprints inside a solution of the catalyst and dye, the calcium ions present in the fingerprint formed a reddish-pink complex within two minutes, that could be easily detected.

"The entire fingerprint pattern is clear, can be seen even with the naked eye and persist over prolonged periods", said Dr Sodhi, a senior lecturer in the Department of Chemistry at the S.G.T.B. Khalsa College. Any accidental rubbing or scratches on the paper did not affect the fingerprints, he added.

So far, forensic experts have been using reagents such as silver nitrate for detecting sodium chloride, iodine for fatty acids and ninhydrin reagent for amino acids in the sweat.

The researchers plan future studies on two more aspects of fixing calcium ions, determining whether old fingerprints can be detected by this technique.

Wool Testing Lab at GND Varsity

The Union Textiles Ministry has sanctioned a Rs 34 lakh grant to the Guru Nanak Dev University for setting up a wool testing laboratory. This was revealed by the Dean of academic affairs of the university the Dr S S Parmar.

The international wool secretariat has already provided wool dye and other fibre testing machines worth Rs 20 lakh and with the installation of fastness to light testing equipment, the laboratory would be able to conduct all major tests for woollen and other fabrics for the benefit of small scale woollen manufacturers in the State.

Dr Parmar said about two years ago Vice Chancellor Prof G S Radhawa had taken a major initiative to involve industry with the university and keeping this in mind the university's various faculties decided to start vocational courses and make available its infrastructure and laboratories to the industry.

The pollution control laboratory has already started receiving samples from the local industry for conducting various tests. President of the Amritsar printers and processing industry Dr Narinder Kumar Jain had welcomed the establishment of the laboratory in Amritsar.

The dean also disclosed that the university had established Department of Textile Chemistry and started a three-year degree course in textile chemistry from the current academic session primarily for the benefit of local textile industry.

Major textile units like OCM, JCT, Phagwara and others have offered the services of their technical managers for teaching and providing six months training to graduates.

Promoting National Integration

A new programme to encourage appreciation of India's cultural diversity is reportedly being initiated in 24 colleges across the country. The Seethalakshmi Ramaswami College at Tirucharapalli, Tamil Nadu, proposes to introduce a course on the evolution of Indian culture while Sahyadri College in Shimoga, Karnataka, plans to use diversity as a source of learning and identify areas of conflict for case studies.

This programme is based on the principle that healthy cultural interaction is conducive to national integration. Funded by an American foundation, it is in fact modelled on a similar programme in the US which had been successfully introduced to overcome racial prejudice on campus. The Indian college campus has been chosen for the introduction of this programme as it is at college that the young Indian adult deals — for the first time — with a microcosmic version of the society he/she would encounter later, and it is here that the student often exhibits his/her religious and social prejudices through violence, intolerance and disruptive behaviour.

Victor Johnson Award for Prof Parikh

Professor Ramlal Parikh, Vice-Chancellor, Gujarat Vidyapith, has been awarded the Victor Johnson Award by the International Community Education Association (ICEA) for his outstanding contribution to the cause of community education in the Asian region of ICEA over many years.

Professor Parikh is well known internationally as an author and as a speaker on issues such as non-violence and peace, illiteracy, population and environment. He has been extremely active in promoting the vital importance of a community approach in addressing social problems. In particular, he has campaigned tirelessly in the state of Gujarat on behalf of those adults and children who have no access to education. His advocacy of a community-based response to the problem of illiteracy and his insistence on the essential role of non-government organisations and voluntary agencies have contributed in no small way to the advances that have been made in the efforts to achieve literacy for all as a precondition to education for all.

Professor Parikh is Chairman of the Indian Society for Community Education, the second largest national community education association in the world. Since 1983, he has been Regional Director of ICEA's Asian Region. Under his leadership of over twelve years, the community education movement in Asia has steadily grown and national associations are now well established in several Asian countries.

The award will be presented to Prof. Parikh at the Association's Seventh World Conference to be held in Jomtien, Thailand some time in August this year.

Foreign Languages Deptt at GNDU

Guru Nanak Dev University is reported to have created a new Department of Foreign Languages by bifurcating the Department of Classical, Foreign and Indian languages. Dr P.S. Sharma has been appointed head of this department.

The classical and Indian languages portion of the present department has been attached with the School of Punjabi Studies and the posts meant for this discipline have also been transferred to the School of Punjabi Studies.

Rs 190 Cr for Education to NE

The Ministry of Human Resource Development would be spending around Rs 190 crore for the development of higher education as well as the spread of primary education in the North-East. This was stated by the Union HRD Minister Mr Madhavrao Scindia in Guwahati recently. Total literacy programme and the universal education had been identified as the thrust areas, he said.

Out of 17 crore children in the 6-14 age group, about 3.5 crore did not have any education. The Government, through its universal education programme, would see that every child had access to primary schools which would be located even in remote areas.

Seven million volunteers were engaged in imparting education to 4.5 crore illiterate people in the 15-35 age group.

Mr Scindia also announced that the Centre would spend Rs 54 crore by 1996 on the construction of the sixth Indian Institute of Technology (IIT) of the country in Guwahati. The North-East would figure very prominently in the expansion of education all over the country, Mr Scindia added.

State Governor Mr. Loknath Mishra, said the IIT was functioning with over 70 students selected from an all-India merit list. It did not belong to any area, place, sect, religion or group, but was a common asset for the nation.

Jammu Univ Council Meets

The Governor of Jammu & Kashmir Gen K.V. Krishna Rao (Retd), who is also the Chancellor of Jammu University, presided over a meeting of the University Council held in Jammu recently.

He said the university should lay emphasis on extra-curricular activities in addition to academic pursuits. He said more inter-university and even national events should be arranged.

The meeting decided to raise the grants for students under the merit scholarship and merit-cum-means scholarship schemes from Rs 75 per month to Rs 150.

The meeting also discussed the current year's plan of more than Rs 14 crore of the university.

SAARC Fellowships

SAARC countries have instituted fellowships and scholarships for mobility of scholars in the region which will be tenable for one year and awarded to teachers in universities and colleges with published works of high quality in economics, history, physics, botany, mathematics, chemistry, water resources and management.

The University Grants Commission (UGC) has invited applications from Indian nationals for the award of fellowships and scholarships for 1996-97 in the SAARC countries — Pakistan, Bangladesh, Maldives, Sri Lanka, Bhutan and Nepal. The scholarships are for a masters' degree programme in science, language, social science, engineering, agriculture and medicine.

Women Teachers Convention

The first All India College & University Women Teachers Convention will be held at Pune on 4-5 September 1995. The purpose of the convention is (i) Academic Excellence, (ii) Interaction with the youth; and (iii) to create awareness of prestige of women in her profession and in the society. The topics proposed to be discussed include (1) Student Teacher Interaction : Counselling; and (2) The role of Women Teacher in decision making.

Eminent academic personalities, women delegates from foreign countries, and women teachers participants from 212 universities all over India and their affiliated colleges and institutions are expected to attend the convention.

For further details, contact : All India Women Teachers Convention
C/o Institute of Science, Apte Road,
Pune-411 004.

News from Agricultural Universities

Protect the Seed for Higher Yield

In the field surveys conducted over the three consecutive years during wheat sowing period all over the state, Dr. Rakesh Kashyap, an Entomologist at the Chaudhary Charan Singh Haryana Agricultural University (CCSHAU) had found that only 13.2 per cent samples were free from insect-pests, while over 67 per cent of the samples were damaged more than the minimum seed certification standards. The samples were collected from the drill boxes at the time of sowing operation.

He said Rhizopertha, commonly called lesser grain borer or 'ghun' and rice weevil, which are serious insects, were predominant in the state causing major loss to seed and grain. However, the former was common in both dry and wet zones of the state while the latter was prevalent in wet zone only.

Dr. Kashyap revealed that the major bottleneck was found in the storage practices. It was apparent from the survey results that 72 per cent of the farmers could not even make out the difference between seed and grain and they used the unconsumed stored grain as seed the following season. In fact, all the uncleaned produce was stored in a room or Thekka for consumption as grain. While the left over was used as seed. He said during survey when the farmers were asked what measures would they take if they knew that there was insect-pest infestation of seed, 96.5 per cent farmers were unaware of the measures to be followed, while only meagre number that is 2.6 and 0.9 per cent reported that they would sieve the seed before sowing and increase the seed rate, respectively.

According to Dr. Kashyap, the farmers should store their wheat seed separately from the grain and due care should be taken for insect-pest management for the stored seed. He said the stored seed should have around nine per cent moisture content and fumigated with aluminium phosphide tablets at the rate of 7-10 tablets of 3 grams each per thousand cubic feet area. The seed having more than 14 per cent moisture content, if fumigated, may deteriorate the quality of the seed.

Dr. Kashyap said that in case the seed was damaged by insect-pests, it should be either sieved or the seed rate be proportionately increased at the time of sowing.

Satellite Link for ICAR Institutes

The Indian Council of Agricultural Research (ICAR) is reported to have agreed in principle to provide VSAT (satellite link) of KU-Band for video conferencing to three premier ICAR institutes, including the National Dairy Research Institute. This was revealed by the NDRI Director, Dr. O.S. Tomar, while delivering the theme address at a four-day workshop on "DC based Databases and Software Packages" held in Karnal recently.

Inaugurating the workshop, Dr. J.R. Arora, Director, Department of Bio-Technology, Ministry of Science and Technology, said that 33 leading research laboratories and universities in the country were presently carrying out various types of exploratory works which had provided a bridge between bio-technology and information technology.

News from UGC

Countrywide Classroom Programme

Between 16th August to 31st August, 1995, the following schedule of telecast on higher education through INSAT-ID under the auspices of the University Grants Commission will be observed. The Programme is presented in two sets of one hour duration each every day from 6.00 a.m. to 7.00 a.m. and 1.00 p.m. to 2.00 p.m. The programme is available on the TV Network throughout the country.

Ist Transmission
6.00 a.m. to 7.00 a.m.

17.8.95

"Microwave Antenna - Part I"

"Rainfall and Water Resources - Part I"

"English Romantic Poetry - Part II"

19.8.95

"New Horizons - Part XXVI"

"Algebraic Geometry"

"Negotiable Instrument - Part II : Cheque"

20.8.95

"Career Counselling : Applied Arts"

"Current Affairs : Economics & Commerce - Part X"

22.8.95

"Question Time - XVII"

"Naturopathy as an Alternative Medicine"

24.8.95

"Microwave Antenna - Part II"

"Rainfall and Water Resources - Part II"

"English Romantic Poetry - Part III"

26.8.95

"Mathe - majik"

"Elements of Marketing"

"Environmental Engineering : Secondary Waste Water"

27.8.95

"Career Counselling : Travel and Tourism"

"Four Great Inventions of Ancient China"

"The Week Ahead"

29.8.95

"Bulk Crystal Growth from Melt"

"Lichens"

"Effect of UV Radiations on Human Skin"

31.8.95

"Fibre Connectors and Splices"

"Coal - Part I : The Captive Sun"

"The Literary Biography"

IInd Transmission

1.00 p.m. to 2.00 p.m.

16.8.95

"Natural Products : Products and Science"

"Archaic Scripts of the World"

"Tulsi : From Worship to Cure"

17.8.95

"Searching the Frontiers - Part II : Bioceramics"

"Pigments and Dyes"

"Perspectives in Persian and Urdu on Indian Religions"

18.8.95

"Starfinder : Discoveries with the Hubble Space Telescope - Part III : Why a Space Telescope?"

"The Working Children of Kashmir"

"Mangroves - Life on the Margin"

19.8.95

"The Dawn After - Part II"

"Polo - The Royal Sport - Part II : The Modern Techniques"

"Looking at Paintings"

20.8.95

No Telecast

21.8.95

"The Week Ahead"

"Question Time - XVII"

"Kinetic Objects"

22.8.95

"Issues in Higher Education - Part IV"

"Ayurveda : The Science of Life - An Introduction"

"S.O.S. Waste"

23.8.95

"Keeping the City Moving : New York City Transportation"

"Molecular Biology - I : In Search of an Alternative Rice"

"Brain Death"

24.8.95

"Searching the Frontiers - Part III : The Wonder Wire"

"Exploration of Atomic Minerals - Part I"

"Glorious Past, Uncertain Future"

25.8.95

"Starfinder : Discoveries with the Hubble Space Telescope - Part IV : The Expanding Universe"

"Preserving the Past - Part I"

"Water, Water Everywhere"

26.8.95

"The Dawn After - Part III"

"New Vistas in Carnatic Music"

"Aerobics"

27.8.95

No Telecast

28.8.95

"The Week Ahead"

"Through Business Communication"

"Anar (Pomegranate)"

29.8.95

"Issues in Higher Education - Part V"

"Anaesthesia"

30.8.95

"The Art of Screen Printing"

"History of Indian Coinage - Part I : Coinage Emerges"

"Molecular Biology - Part II : The Search Continues"

31.8.95

"Searching the Frontiers - Part IV : The Sol. Gel Process"

"Exploration of Atomic Minerals - Part II"

"Ayurveda Medicine"

Hindi Telecast

प्रात: 6.00 से 6.30 बजे तक

16.8.95

"राग संगीत – भाग 3"

18.8.95

"मिर्च"

21.8.95

"दो तीन नियम – भाग 2"

"द चिप"

23.8.95

"राग संगीत – भाग 4 : भैरवी"

25.8.95

"दो तीन नियम – भाग 3"

"भारतीय रंगमंच"

28.8.95

"राग संगीत – भाग 5 : बागेश्री"

30.8.95

"राग संगीत – भाग 6 : बिहाग"

BOOK REVIEW

Management Principles for Beginners

M. Akbar*

Gene Burton and Manab Thakur. Management Today: Principles and Practice. New Delhi, Tata McGraw-Hill, 1995. Pp x+608. Rs. 120/-.

This textbook essentially tries to integrate four managerial functions, four organisational resources and three managerial challenges which are considered interrelated and are thought to be most important for managing organisations. Management issues can be analysed by the students and working executives with the help of this proposed text framework. The four managerial functions include planning, organising, leading and controlling which are the traditional managerial functions found in the classical management literature. Perhaps the traditional management function of 'directing' has been replaced by 'leading', because of the change in the traditional management paradigm that has been brought about by the very high rate of change in the environment, and the tremendous amount of literature produced on leadership — the prime mover of organisations.

It is the contention of the book that the traditional managerial functions are good enough to run effective and efficient organisations. The relationship of these managerial functions with four resources, i.e., human resources, financial resources, physical resources and information resources are highlighted. Here also the information resources are added to the existing model of organisational resources.

The three interrelated managerial challenges discussed in the text are management of work, management of people, and management of operations. In the part dealing with 'management of people', increased emphasis has been laid on Human Resource Management (HRM) perspective in recognition of the criticality of this resource as stressed in the contemporary management literature. The book also recognises the different levels of managers, i.e. top managers, middle managers and first-line managers and their distribution across different functional areas like marketing, finance, operations, human resources, administration and others. Besides, the book also highlights a variety of roles a manager has to play in an organisation, i.e., interpersonal roles, figurehead roles, leader roles, liaison role, information role, monitor role, disseminator role, spokesperson role, decision role, entrepreneur role, disturbance-handler role, resource allocator role, and negotiator role. In addition, the authors also presents contemporary management issues like management in international arena, change and organisation development, managerial ethos and challenges in future, including business ethics and social responsibility of business organisations. The book recognises the need for contemporary management philosophy, tools and techniques. According to the authors,

> "To meet the growing challenges of today's dynamic and complex business environment, there is a burgeoning need for a new breed of managers with contemporary management tools. The old management philosophies and techniques cannot really withstand the pressures of the modern business arena. Today's manager must first have the vision to identify the opportunities and threats that lie in the future, and then have an ability to effectively exploit the opportunities and to defend against the threats. Just as there are more business opportunities today than ever before, there are also more business failures. The manager of the future must have a management education, market creativity, entrepreneurship, analytical skills, and a flexible array of management tools to survive the rigours of competition. Failure to achieve managerial success means a cumulative failure for the individual, the organization, and the society."

But the framework of the book cannot take the reader very far in the quest for acquiring managerial competence as suggested above by the authors themselves, because the traditional paradigm of controlling, planning, leading, organising is no more adequate to manage future organisations which require vision, creativity, strategy, customer orientation, quality consciousness and innovativeness of an entrepreneurial manager. Besides, some of the critical functions like marketing and R&D are alto-

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Faculty Member, Indian Institute of Management, Lucknow-226 013.

gether missing from the book. It does not have much of Porter's analytical strategic tools, or Kotler's marketing framework or Kenter's or Waterman's descriptions of excellent men/women and organisations. The books is of very generic nature with still the traditional framework but discussing contemporary management issues. Thus the book lacks focus and coherence between framework and managerial issues. One can find much of the literature in the textbooks of 1970's and 1980's. The book also does not have clarity of its readership. Given the nature of the contents and pedagogical reinforces the book may be prescribed for the students of undergraduate management courses. For post-graduate programmes, it has to be combined with advance readings from books of functional specialisations in an integrated framework including business environment, strategic management and management of change that would groom the entrepreneurial managers of tomorrow.

The most attractive aspects of the book are its cheap price, good quality get up, its lucid style and readability. Another redeeming feature are the references and illustrations from countries like India, China and Japan, etc beside other advanced countries, which brings the reader closer to his moorings while trying to learn management principles and practices. The book can be recommended for the beginners of management education.

The book is divided into five parts : Nature of managerial performance, management of work, management of people, management of resources and contemporary management issues. The nineteen chapters are distributed over these five parts. To reinforce learning, the book has all the makings of a text book — examples, caselets, exercises and questions, which force thinking on the contents discussed in the respective chapters. Index and bibliography are also included. All of this just for a price of Rs. 120/- is worth buying. Strongly recommended for entry level courses in management, and a base book for students of advance management courses. This book is certainly not for practising managers; a copy in the manager's bookshelf, however, would not hurt for occasional references to a few conceptual issues and management techniques. A copy of the book in the institutional libraries will be a valuable addition at a very low cost.

INDIAN COUNCIL OF MEDICAL RESEARCH

Applications are invited upto 15th September, 1995 for the following posts at the *Council's Hqrs. Office/Centre* :-

(A) AT THE ICMR HEADQUARTERS, NEW DELHI - SENIOR DEPUTY DIRECTOR GENERAL TO HEAD THE DIVISION OF NON-COMMUNICABLE DISEASES-(One post)
Qualification & Experience: Essential: (1) MBBS with M.D./Ph.D in Pathology/Medicine/ (Different branches) such as Cardiology, Neurology, Haematology etc./Preventive and Social Medicine or related disciplines. 15 years of research/teaching experience in non-communicable diseases. *(2)* Original work as *evidenced by publications in recognised journals* **Desirable:** Administrative experience in responsible positions. **Job Requirements:** It is a top research management post. The incumbent will be responsible for planning, formulating, conducting, monitoring and evaluating research in non-communicable diseases and to provide high level leadership in the identification/formulation and successful implementation of R&D programmes. He/She is also expected to interact and collaborate with other agencies at national and international levels, as and when necessary

(B) AT THE TUBERCULOSIS RESEARCH CENTRE, MADRAS-DIRECTOR-(One post)
Qualifications & Experience: Essential: 1) Doctoral degree (M.D/Ph.D) in a biomedical discipline related to research in Tuberculosis, alongwith 15 years research/teaching experience in the field of Tuberculosis 2) Original research contributions in the field of Tuberculosis and mycobacterial as evidenced by publications in recognised journals. **Desirable:** Administrative/ Managerial experience in responsible positions. **Job Requirements:** The Director is expected *to provide high level leadership to the team of Scientists in the identification, formulation and* implementation of Research Programmes and projects of national importance in Tuberculosis, in its multi-dimensional aspects (such as Chemotherapeutic, epidemiological, sociological, microbiological, immunological etc.). He/She is expected to develop meaningful linkages with academic institutions, as also Govt. and International agencies dealing with Tuberculosis/Mycobacterial research.
Salary/Conditions of Service: The scale of pay attached to the above post is Rs. 5900-200-6700 plus allowances as per Central Govt. Rules. Medical aid and leave travel concession are admissible to the employee and his/her dependent family members as per Central Govt. Rules AGE: Below 50 years, SC/ST candidates are allowed relaxation in accordance with Central Govt. Rules *in force. Benefits of pension are admissible as per rules in force. Private practice is* not allowed. However non-practising allowance @ Rs. 950/- p.m on pay upto Rs 5999/- and Rs. 1000/- p.m. on pay of Rs 6000/- and above is admissible to medical graduates only as per rules of the Council. Application forms can be obtained from the office of the **Director General, Indian Council of Medical Research, Ansari Nagar, Post Box No. 4911, New Delhi-110 029. The completed application from accompanied with crossed Postal Order(s) for Rs. 8/- (Rupees Eight only) payable to D.G. ICMR should be sent to the Director General at the above address. SC/ST candidates are not required to pay this amount.** Applications without postal order will not be entertained. Candidates called for personal discussion will be paid 1st class rail fare by the shortest route. No TA/DA is admissible for joining the post or on termination of appointment. *Applications from the employees working under the Central/ State Govt.,* Semi Govt. and Govt. controlled undertakings should be sent through their employers and should be received before the closing date alongwith the certificate of the employer that the applicant will be relieved within three months of his/her receipt of appointment orders. Advance copies will be considered subject to the condition that a 'No Objection Certificate' from the employers is produced at the time of personal discussion. Separate applications need to be submitted for each of the two posts. Applications received after the closing date will not be considered. The *name of the post applied for must be indicated* on the application. *Incomplete applications will not* be entertained. Candidates called for personal discussion have the option to answer in Hindi also. **The Director General, ICMR reserves the right to short list the applicants to be called *for personal discussion.***

Any CANVASSING by on or behalf of the candidates or bringing political or other outside influence with regard to the selection/recruitment shall be considered as DIS-QUALIFICATION.

THESES OF THE MONTH

A list of doctoral theses accepted by Indian Universities

PHYSICAL SCIENCES

Mathematics

1. Biren Singh, Thoudam. **Some problems on facility location in deterministic models.** Manipur. Prof R K Tarachand Singh, Department of Mathematics, Manipur University, Imphal.

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   Eligibility: (For Sl. Nos. 1 & 2): Diploma in Civil Engineering/B.E. Civil Engineering/B.E. Civil and Structural Engineering/A.M.I.E. Civil Engineering.
3. Diploma in Chemical Process, Instrumentation and Control (English Medium)
   Eligibility: i. B.Sc. Degree holders with Chemistry as one of the subjects.
   ii. Diploma holders (three years) in any branch of Engineering or Technology.
   iii. Bachelor of Pharmacy
4. Diploma in Maintenance Management (English Medium)
   Eligibility: i. B.E. (Mechanical/Production/Electrical/ Chemical)
   ii. A.M.I.E. (Mechanical/Electrical/Chemical)
   iii. Diploma in Engineering (Mechanical/Electrical /Chemical).
5. Post Graduate Diploma in Banking (English Medium)
6. Post Graduate Diploma in Co-operative Management (English Medium)
   Eligibility: (For Sl. Nos. 5 & 6): Bachelor's degree in Arts, Science, Commerce, Agriculture, or Engineering or equivalent qualifications.
7. Diploma in Sugar Technology (English Medium)
8. Diploma in Fertilizer Technology (English Medium)
   Eligibility: (For Sl. Nos. 7 & 8);
   i. B.Sc. degree holders with Chemistry as one of the subjects
   ii. B.Sc. (Agriculture)
   iii. Diploma (3 years) in either Chemical or Mechanical Engineering
9. Diploma in Industrial Safety (English Medium)
   Eligibility: A Graduate in Science/Arts/Agriculture/B.Pharm./M.B.B.S./Degree in Nursing or any Diploma (3 years) holder/Degree holder in Engineering or Technology
10. Diploma in Industrial Pollution and Control (English Medium)
    Eligibility: B.Sc. degree with Chemistry/Physics/Botany /Zoology as Main or ancillary subjects or Diploma (3 years) holders in any Branch of Engineering and Technology or M.B.B.S./B.Pharm./Degree in Nursing.
11. Diploma in Industrial Hygiene (English Medium)
    Eligibility: a. Graduates in Science (B.Sc.)
    b. M.B.B.S./B.E./B.E. (Chem.)/B.Tech.
    c. B. Pharm/B.Sc. (Agri)
    d. Diploma (3 years) in Engineering/Nursing
    e. M.B.A. (If the applicants have studied Physics, Chemistry and Botany at the Higher Secondary level) .
12. Diploma in Energy Management Technology (English Medium)
    Eligibility: a. Graduates in B.A./B.Sc./B.Com.
    b. B.E./B.E. (Chem.)/B.Tech./B.Pharm.
    c. B.Sc. (Agri.)/M.B.A.
    d. Diploma (3 years) in Engineering/Technology
13. Post Graduate Diploma in Guidance and Counselling (English Medium)
    Eligibility: i. B.A. Psychology/M.A. Psychology
    ii. Graduation in any discipline with a minimum of 3 years experience in Teaching/Administrative/Clinical Profession

Certificate Course In

14. Automobile Technology (English & Tamil Medium)
15. Offset Machine Printing (English & Tamil Medium)
16. Binding & Finishing (English & Tamil Medium)
17. Office Management (English & Tamil Medium)
    Eligibility: (For Sl. Nos. 14 to 17): A Pass in SSLC (X Standard) or equivalent examinations.

VIII. LIBRARY SCIENCE COURSES:

Duration: **One Year**

1. B.L.I.S. (Bachelor of Library and Information Science (English Medium)
   Eligibility: Any degree
2. M.L.I.S. (Master of Library and Information Science) (English Medium)
   Eligibility: Bachelor of Library Science/Bachelor of Library and Information Science or equivalent qualifications.

COST OF APPLICATION FORM FOR ALL COURSES EXCEPT M.B.A. IS RS. 50/- COST OF APPLICATION FORM FOR M.B.A. IS RS. 200/-

APPLICATION FORM AND PROSPECTUS CAN BE HAD FROM THE DIRECTOR, DIRECTORATE OF DISTANCE EDUCATION, ANNAMALAI UNIVERSITY, ANNAMALAI NAGAR - 600 002 by sending a requisition along with a crossed Demand Draft drawn in favour of the **Director, D.D.E.. Annamalai University**, on any bank at Annamalainagar/Chidambaram, mentioning clearly the name of the course for which the application form is required and a self-addressed unstamped cover of size 25 cm x 12 cm. Cheques, Postal Orders and Money Orders are **not accepted.**

Applications can also be had in person on cash payment from the Directorate of Distance Education and the following Study Centres and Information Centres of the Directorate.

Those who want to get applications by post should apply to the Directorate only and not to the Study Centres.

1. ANNAMALAI NAGAR : DDE Building
Annamalai University
Annamalainagar - 608 002

2. CALCUTTA : 19, Sardar Sankar Road
Calcutta - 700 029
Phone: 767215

3. COIMBATORE : 72, Sarojini Street, Ram Nagar, Coimbatore - 641 009
Phone: 234406

4. KARAIKUDI : 7, Seventh Street
Subramaniapuram
Karaikudi - 623 002
Phone: 23417

5. MADRAS : 19, Rukmani Lakshmipathi Road
(Behind Air India Office)
Egmore, Madras - 600 008
Phone: 8261590/8261909

6. Information Centre : 27, North Park Street
Venkatapuram
Ambattur, Madras - 600 053

7. Information Centre : 11, First Cross Street
New Colony
Chromepet, Madras - 600 044

8. MADURAI : 176, North Veli Street
Madurai - 625 001
Phone: 37327

9. NEW DELHI : Rama Market (Second Floor)
E-249, Munirka Village
New Delhi - 110 057
Phone: 6963345

10. SALEM : 15, Dr. Subbarayan Road
(Near Palace Theatre)
Salem - 636 001
Phone: 419660

11. TIRUNELVELI : 49-C, Kailasapuram North Street
Bava Building (Second Floor)
(Near Bus Stand)
Tirunelveli - 627 001
Phone: 322923

12. TIRUCHI : 32-B, Seventh Cross
Thillai Nagar
Tiruchi - 620 018

13. VELLORE : 4, Thiagarajapuram,
(Near Lakshmi Theatre)
Vellore - 632 001
Phone: 27647

14. NAGERCOIL (Information Centre) : 316-E, K.P. Road
Nagercoil - 629 003
Phone: 30561

All the Study Centres and Information Centres except that at Annamalainagar will remain closed on all Tuesdays, Second Mondays and all other public holidays.

	MBA COURSE	OTHER COURSES
Last Date for issue of applications	**11.8.95**	**27.9.95**
Last Date for receipt of filled applications	**16.8.95**	**30.9.95**

Filled in applications should be sent only to the **Director, Directorate of Distance Education, Annamalai University, Annamalainagar, Tamil Nadu, PIN CODE 608 002.** IN NO CASE FILLED IN APPLICATIONS SHOULD BE SENT TO THE STUDY CENTRES.

SPOT SELECTION FOR ADMISSION

Spot Selection for admission to all courses except M.Sc. (Physics, Chemistry, Zoology and Botany), B.Ed. and M.B.A. are being made through all our Study Centres if the applicants submit along with their applications the necessary original certificates, xerox copy of certificates, Demand Draft for the prescribed fee and two copies of their recent photographs of size 4 cm x 3 cm. The spot *selection is provisional and subject to confirmation by the* Director.

Spot selection for admission to B.Ed. degree course for Tamil Nadu and Pondicherry candidates only is being made at all our Study Centres in Tamil Nadu.

CAUTION

THE DIRECTORATE HAS NO AGENTS. APPLICANTS ARE ADVISED TO WRITE TO THE DIRECTORATE INDIVIDUALLY FOR APPLICATION FORMS AND ADMISSION. APPLICATIONS FOR ADMISSION RECEIVED THROUGH TUTORIALS OR ANY OTHER AGENCIES WILL BE SUMMARILY REJECTED.

NOTE: Where a degree is prescribed as the qualification for admission to a course, applicants who have passed the qualifying degree examination under the 10 + 2 + 3/11 + 1 + 3/11 + 2 + 2 year pattern and under the Open University System alone are eligible for admission to the course.

PLACE: Annamalainagar
DATE: 28-07-95

Dr. V. GOMATINAYAGAM
DIRECTOR I/C

CLASSIFIED ADVERTISEMENTS

RAJASTHAN AGRICULTURAL UNIVERSITY: BIKANER

Advertisement No. 1/95 **Dated: 25.07.1995**

Applications on prescribed form are invited for the following posts on regular basis for the tenure as mentioned against each in the University. The application form etc. can be obtained from the office of the Registrar, Rajasthan Agricultural University, Bikaner on payment of Rs. 10/- through Demand Draft payable to the Comptroller, Rajasthan Agricultural University, Bikaner alongwith a self addressed envelope of 27x12 cms. size bearing postal stamps of Rs. 9/- only upto 24.8.95. Completed application form in all respects alongwith attested copies of certificate must reach the REGISTRAR, RAJASTHAN AGRICULTURAL UNIVERSITY, BIKANER on or before 30.8.1995.

Name of post	No.of post	Tenure
FACULTY OF AGRICULTURE		
1. DEAN Agriculture College	Three	3 years which can be extended for another 3 years.
2. DIRECTOR (RESEARCH) Agriculture	One	5 years which can be extended for another 5 years.
3. DIRECTOR EXTENSION EDUCATION	One	5 years which can be extended for another 5 years.
FACULTY OF HOME SCIENCE		
4. DEAN Home Science College	Two	3 years which can be extended for another 3 years.
FACULTY OF VETY. & ANIMAL SCIENCE		
5. DEAN College of Vety. & Animal Science	One	3 years which can be extended for another 3 years.
6. DIRECTOR (RESEARCH) Directorate of Vety. & Animal Science	One	5 years which can be extended for another 5 years.
FACULTY OF AGRIL. ENGINEERING		
7. DEAN College of Technology & Agril. Engg.	One	3 years which can be extended for another 3 years.
OTHERS		
8. DEAN Post Graduate Studies	One	-do-
9. DEAN Student Welfare	One	-do-
10. DIRECTOR PLANNING & MONITORING	One	5 years which can be extended for another 5 years

PAY SCALE : for the post No. 1 to 10
(Rs. 4500-150-5700-200-7300)
plus Usual Allowances

A. **QUALIFICATIONS FOR**
DEAN OF AGRICULTURE COLLEGE/DIRECTOR (RESEARCH) AGRICULTURE/DIRECTOR EXTENSION EDUCATION/ DEAN HOME SCIENCE/DEAN VETY. & ANIMAL SCIENCE/DIRECTOR VETY. & ANIMAL SCIENCE/DEAN COLLEGE OF TECHNOLOGY & AGRIL. ENGINEERING.

ESSENTIAL :

1. Good Master's degree with good academic record and minimum of 15 years experience in teaching/research/extension in Institution of University standard in the relevant field of Agriculture/Home Science/Vety. & Animal Science/Agril. Engineering. Specialised knowledge in one or more specified Field with experience in guiding research.
2. Professional/Scientific work of outstanding merit with Doctorate degree.
3. Atleast 2 years experience as a Professor or an equivalent post.

B. **QUALIFICATIONS FOR :**
DEAN, POST GRADUATE STUDIES
ESSENTIAL :

1. Good Master's degree with good academic record and minimum of 15 years experience in teaching/research/extension in Institution of University standard in the relevant field of Agriculture/Home Science/Vety. & Animal Science/Agri. Engineering/Specialised knowledge in one or more specified field with experience in guiding research.
2. Professional/Scientific work of outstanding merit with Doctorate degree.
3. Atleast 2 years experience as a Professor or an equivalent post.

DESIRABLE:

Reputation for initiative, leadership and ability to organise, coordinate and supervise Teaching & Research activities in different disciplines.

C. **QUALIFICATIONS FOR :**
DEAN, STUDENT WELFARE
ESSENTIAL :

1. Good Master's degree with Good academic record and minimum of 15

years experience in teaching/research/extension in Institution of University standard in the faculty of Agriculture/Veterinary & Animal Science/Dairy Science/Home Science/Agricultural Engineering.

2. Atleast 10 years experience of working in a College/University in a responsible position, particularly in relation to management of Students Hostels and Organising University games and sports and extra curricular activities.

DESIRABLE :

Knowledge of Rajasthani Language/Dialect & culture.

D. **QUALIFICATIONS FOR :**

DIRECTOR PLANNING & MONITORING

ESSENTIAL :

1. Good Master's degree with good academic record and minimum of 15 years experience in teaching/research/extension in Institution of University standard. Specialised knowledge in one or more specified field with experience in guiding research.
2. Professional scientific work of outstanding merit with Doctorate Degree.
3. Atleast 2 years experience as a Professor or an equivalent post.

(Appropriate field is defined to include Ph.D./Master's degree in major area in any branch of Agriculture/Veterinary & Animal Science/Home Science/Dairy Science/Agricultural Engineering).

DESIRABLE :

Experience, Monitoring, Planning and evaluation.

GENERAL NOTE :

1. Number of Post(s) may be increased or decreased.
2. Application forms received after the expiry of the last date will not be entertained.
3. 16% posts would be reserved for Scheduled castes, 12% for Scheduled Tribes, and 21% for Backward Classes subject to general suitability.
4. A higher start in the grade may be considered for exceptionally qualified candidates based on their academic achievement & personal interview.
5. The University reserves the rights not to fill up post(s) advertised.

REGISTRAR

DIBRUGARH UNIVERSITY

DIBRUGARH-786004, ASSAM

ADVT. NO 4/95

Applications are invited for the following posts:

1) Lecturer (Deptt. of Education) : Two posts.

(Temporary/Leave Vacancy) For one post—M.A. in Education with minimum 55% marks.

Spl. Economics of Education/Measurement & Evaluation in Education.

Desirable : M.Phil or Ph.D. degree.

For second post M.A. in English with 55% marks in the subject with B.Ed degree having English as one of the Method subjects in B.Ed or CIEFL diploma.

Desirable : M.Ed.

2) Lecturer in Chemistry (temporary) : (one) post—M.Sc in Inorganic Chemistry.

Other terms & conditions as per U.G.C. norms.

Scale of pay :

Rs. 2200-75-2800-100-4000/- p.m. plus all other allowances as admissible under the rules of the University.

8(eight) copies of applications with complete bio-data including application fee of Rs. 20/- (twenty) only by Bank Draft payable at State Bank of India, Dibrugarh University Branch in favour of the REGISTRAR, *DIBRUGARH UNIVERSITY*, DIBRUGARH-786004, should reach the undersigned on or **before 20th August, 1995**. *If employed, no objection certificate* of employer is necessary.

REGISTRAR

Concept

INFORMATION INDIA : 1992-93
Global View
S.P. Agrawal and J.C. Aggarwal

(538-8)	Hardbound	Rs. 500

Although the focus of this volume is on India of 1992-93, it provides useful overview of significant development that took place in the world as a whole. A comparative study of indicators of development with regard to 170 countries has been included. An attempt has been made to provide almost all embracing facts and figures with regard to various factors of development in India since 1947.

Dr. S. P. Agrawal is the former Member-Secretary, Indian Association of Social Science Institution.

J.C. Aggarwal is the former Executive Director, Delhi Bureau of Textbooks, Delhi Administration.

Publishers: Ph.: 5554042, 5504042
CONCEPT PUBLISHING COMPANY
A/15-16, Commercial Block, Mohan Garden,
New Delhi - 110059 (India)
Cable : CONPUBCO Fax : (011) 5598898

RAJASTHAN AGRICULTURAL UNIVERSITY: BIKANER

Advt. No. 2/95 **Dated: 25.07.1995**

Applications on prescribed form are invited for recruitment to under noted posts in the University. Application form and full details about qualifications etc. can be obtained from the Registrar, Rajasthan Agricultural University, Bikaner- 334002 on a written request. All such requests must be accompanied by Demand Draft for Rs. 10/- (payable to the Comptroller, Rajasthan Agricultural University, Bikaner) and a self addressed envelope (size 27x12 cms.) bearing postage stamps worth Rs. 9/- upto **24.08.1995**. Completed application form alongwith attested copies of certificates in support of qualifications, experience, age etc. must reach the REGISTRAR, RAJASTHAN AGRICULTURAL UNIVERSITY, BIKANER on or before **30.8.1995**.

Such of the candidates as have applied for the post(s) mentioned in this advertisement in response to the previous Advt. No. 3/91, 1/92 & 1/93 of this University, need not apply again, **but they must submit their fresh bio-data (one side typed) on plain paper** regarding additional qualifications, experience and reservations if any, alongwith proof.

FACULTY OF AGRICULTURE		Vacancies				
		Total	Gen.	SC*	ST*	OBC*
PROFESSOR : PAY SCALE Rs. 4500-150-5700-200-7300						
1.	Agronomy	5	3	1	1	-
2.	Plant Breeding & Genetics	4	2	1	1	-
3.	Entomology	2	1	1	-	-
4.	Agriculture Economics	3	2	1	-	-
5.	Extension Education	7	3	2	1	1
6.	Agril. Statistics	1	1	-	-	-
7.	Horticulture	4	2	1	1	-
8.	Crop Physiology (Plant Physiology)	1	1	-	-	-
9.	Animal Production (Animal Husbandry)	2	1	1	-	-
10.	Soil Science & Agril. Chemistry	4	2	1	1	-
ASSOCIATE PROFESSOR : PAY SCALE Rs. 3700-125-4950-150-5700						
1.	Agronomy	1	1	-	-	-
2.	Plant Breeding & Genetics	2	1	1	-	-
3.	Entomology	2	1	1	-	-
4.	Agriculture Economics	2	1	1	-	-
5.	Extension Education	5	3	1	1	-
6	Horticulture	7	3	2	1	1
7.	Nematology	1	1	-	-	-
8.	Soil Science & Agril. Chemistry	5	3	1	1	-
9.	Bio-Chemistry	2	1	1	-	-
10.	Limnology & Fisheries	1	1	-	-	-
11.	Crop Physiology (Plant Physiology)	2	1	1	-	-
12.	Plant Pathology	5	3	1	1	-
13.	Agrostology	1	1	-	-	-
14.	Agroforestry	2	1	1	-	-
15.	Agril. Statistics	2	1	1	-	-
16.	Animal Production	1	1	-	-	-
17.	Plant Breeding (Plant Genetic Engineering/ Molecular Biology)	1	1	-	-	-
ASSISTANT PROFESSOR: PAY SCALE Rs. 2200-75-2800-100-4000						
1.	Agronomy	40	19	7	5	9
2.	Plant Breeding & Genetics	29	14	5	4	6
3.	Agril. Economics	4	2	1	1	-
4.	Soil Science & Agril. Chemistry	12	6	2	2	2
5.	Entomology	23	11	4	3	5
6.	Bio-Chemistry	4	2	1	1	-

7.	Crop Physiology (Plant Physiology)	5	3	1	1	-
8.	Plant Pathology	27	13	5	3	6
9.	Animal Production	20	10	4	2	4
10.	Agrostology	5	3	1	1	-
11.	Horticulture	31	15	5	4	7
12.	Limnology & Fisheries	4	2	1	1	-
13.	Agril. Statistics	1	1	-	-	-
14.	Agrometrology	1	1	-	-	-
15.	Extension Education	26	13	5	3	5
16.	Agroforestry	16	8	3	2	3
17.	Nematology	1	1	-	-	-
18.	Bio-Technology (Tissue culture)	1	1	-	-	-

FACULTY OF DAIRY SCIENCE

PROFESSOR : PAY SCALE Rs. 4500-150-5700-200-7300

1.	Dairy Technology	1	1	-	-	-

ASSOCIATE PROFESSOR : PAY SCALE Rs. 3700-125-4950-150-5700

1.	Dairy Chemistry	1	1	-	-	-
2.	Dairy Technology	1	1	-	-	-
3.	Dairy Microbiology	1	1	-	-	-
4.	Dairy Engineering	1	1	-	-	-

ASSISTANT PROFESSOR : PAY SCALE Rs. 2200-75-2800-100-4000

1.	Dairy Accountancy & Business Management	1	1	-	-	-
2.	Dairy Chemistry	1	1	-	-	-
3.	Dairy Technology	3	2	1	-	-
4.	Dairy Microbiology	1	1	-	-	-
5.	Dairy Engineering	1	1	-	-	-

FACULTY OF HOME SCIENCE

PROFESSOR : PAY SCALE Rs. 4500-150-5700-200-7300

1.	Child Development	1	1	-	-	-
2.	Foods & Nutrition	1	1	-	-	-

ASSOCIATE PROFESSOR : PAY SCALE Rs. 3700-125-4950-150-5700

1.	Home Management	3	2	1	-	-
2.	Clothing & Textile	2	1	1	-	-
3.	Foods & Nutrition	2	1	1	-	-
4.	Child Development	1	1	-	-	-

ASSISTANT PROFESSOR : PAY SCALE Rs. 2200-75-2800-100-4000

1.	Clothing & Textile	3	2	1	-	-
2.	Foods & Nutrition	2	1	1	-	-
3.	Child Development	1	1	-	-	-
4.	Home Management	1	1	-	-	-
5.	Home Science Extension	14	6	3	2	3

FACULTY OF VETERINARY & ANIMAL SCIENCE

PROFESSOR : PAY SCALE Rs. 4500-150-5700-200-7500

1.	Parasitology	1	1	-	-	-
2.	Live-stock Production & Management	1	1	-	-	-
3.	Vety. Microbiology	2	1	1	-	-
4.	Vety. Surgery	1	1	-	-	-
5.	Vety. Physiology & Bio-Chemistry	1	1	-	-	-
6.	Animal Breeding & Genetics	1	1	-	-	-
7.	Vety. Medicine	1	1	-	-	-

ASSOCIATE PROFESSOR : PAY SCALE Rs. 3700-125-4950-150-5700

1.	Vety. Anatomy	1	1	-	-	-
2.	Vety. Microbiology	1	1	-	-	-
3.	Vety. Extension Education	1	1	-	-	-
4.	Vety. Physiology & Bio-Chemistry	1	1	-	-	-

5.	Live-stock Production & Management	1	1	-	-	-
6.	Animal Nutrition	1	1	-	-	-
7.	Animal Breeding & Genetics	1	1	-	-	-
8.	Vety. Medicine	1	1	-	-	-

ASSISTANT PROFESSOR: PAY SCALE Rs. 2200-75-2800-100-4000

1.	Vety. Parasitology	2	1	1	-	-
2.	Vety. Pathology	3	2	1	-	-
3.	Live-stock Production & Management	3	2	1	-	-
4.	Vety. Physiology	3	2	1	-	-
5.	Vety. Microbiology	1	1	-	-	-
6.	Vety. Extension	1	1	-	-	-
7.	Vety. Surgery	1	1	-	-	-
8.	Vety. Medicine	1	1	-	-	-
9.	Animal Breeding & Genetics	1	1	-	-	-
10.	Vety. Gyanaecology	1	1	-	-	-

FACULTY OF ENGINEERING

PROFESSOR : PAY SCALE Rs. 4500-150-5700-200-7300

1.	Processing & Food Engg.	1	1	-	-	-
2.	Soil & Water Conservation Engg.	1	1	-	-	-

ASSOCIATE PROFESSOR : PAY SCALE Rs. 3700-125-4950-150-5700

1.	Farm Mechinery & Power Engg.	2	1	1	-	-
2.	Soil & Water Conservation Engg.	4	2	1	1	-
3.	Mining Engineering	1	1	-	-	-
4.	Electrical Engineering	1	1	-	-	-
5.	Civil Engineering	1	1	-	-	-
6.	Computer	2	1	1	-	-

ASSISTANT PROFESSOR : PAY SCALE Rs. 2200-75-2800-100-4000

1.	Soil & Water Conservation Engg.	12	6	2	2	2
2.	Processing & Food Engg.	1	1	-	-	-
3.	Farm Machinery & Power Engg.	11	5	2	2	2
4.	Computer	1	1	-	-	-
5.	Geology	1	1	-	-	-
6.	Electrical Engineering	1	1	-	-	-
7.	Civil Engineering	1	1	-	-	-
8.	Mech. Engineering	1	1	-	-	-
9.	Physics	5	3	1	1	-
10.	Chemistry	1	1	-	-	-
11.	Mathematics	1	1	-	-	-

ASSISTANT PROFESSOR : PAY SCALE Rs. 2200-75-2800-100-4000

1.	English	1	1	-	-	-

OTHER POSTS :

1.	Controller of Examination (Pay Scale Rs. 3700-125-4700-150-5000)	1	1	-	-	-
2.	Assistant Librarian (Pay Scale Rs. 2200-75-2800-100-4000)	5	3	1	1	-
3.	Supdt. Physical Education (Pay Scale Rs. 2200-75-2800-100-4000)	4	2	1	1	-

4.	Accounts Officer (Pay Scale Rs. 2200-75-2800-100-4000)	3	2	1	-	-
5.	Assistant Engineer (Civil) (Pay Scale Rs. 2200-75-2800-100-4000)	1	1	-	-	-
6.	Asstt. Registrar/Admn. Officer (Pay Scale Rs. 2200-75-2800-100-4000)	11	5	2	2	2

* Subject to general suitability.

GENERAL NOTE :

1. Number of post(s) can be increased or decreased maintaining roster system.
2. Applications received after the expiry of the last date will not be entertained.
3. The candidates belonging to SC/ST/OBC community must submit their caste certificate from the Competent authority, failing which their names will not be considered in Reserved quota.
4. Higher start can be allowed for exceptionally qualified candidate based on their academic achievements & personal interview.
5. University reserves the right not to fill up any or all posts advertised.
6. Where the number of applications received in response to an advertisement is large and it will not be convenient or possible for the University to interview all those candidates, the University may restrict the basis of calling the candidates with higher academic achievements and experience in the relevant field by screening of applications.
7. The candidates applying for the post of Asstt. Professor shall be allowed to appear in the interview subject to clearance of eligibility test conducted by the ASRB/UGC/SLET, unless permitted otherwise. However, candidates who have submitted their Ph.D. thesis upto 31.12.1993 and are awarded degree of Ph.D. before interview are exempted from passing eligibility test.

REGISTRAR

SCHOOL OF CORRESPONDENCE COURSES
ANDHRA UNIVERSITY, VISAKHAPATNAM

ADMISSION NOTIFICATION

Applications are invited from the candidates residing in India for admission into the following courses in the School of Correspondence Courses for the academic year 1995-96.

COURSE	ELIGIBILITY
I. SIX MONTHS FOUNDATION COURSE:	
1. Introductory Course (Both English and Telugu Media). This course is offered to prepare the candidates for Entrance Examination to be held in June, 1996 for Liberalised Admission into B.A./B.Com. Course without any formal academic qualification by supplying study material.	No formal academic qualification is required. But the candidate should have completed 18 years of age by 1st July of the year of examination.
II. GRADUATE COURSES:	
2. B.A. (Both English and Telugu Media) with the combinations of Special English. Special Telugu, Special Hindi, History, Economics, Politics, Public Administration, Sociology and Mathematics.	Intermediate/P.U.C. or equivalent or pass in the Entrance Examination conducted by this school.
3. B.Com. (Both English and Telugu Media)	Intermediate/P.U.C. or equivalent or pass in the Entrance Examination conducted by this School.
4. B.Sc. (English Medium only) with the combination of Maths, Physics and Chemistry.	Intermediate/P.U.C. or equivalent with Physical Sciences and Mathematics.

COURSE	ELIGIBILITY
III. POST-GRADUATE COURSES (TWO YEAR DURATION):	
5. M.A. English	B.A./B.Com./B.Sc./B.A.(O.L.)/B.F.A./B.A.L.
6. M.A. Hindi	B.A,/B.Com./B.Sc. with Hindi as one of the subjects of study (Please see Prospectus for full details).
7. M.A. Telugu	B.A./B.Com./B.Sc. or B.A. (Special) with Telugu as one of the subjects of study or B.Sc. (Home Sciences) with a study of Telugu for 2 years with a maximum of 100 marks for each paper (Please see Prospectus for full details of eligibility).
8. M.A. (Economics (English Medium only)	B.A. with Economics (Main or ancillary)
9. M.A. History (English Medium only)	B.A. (Pass or Hons.)/O.T.B.A./B.A.(OL) with History as one of the subjects.
10. M.A. Politics (English Medium only)	B.A. with Politics or Public Administration as one of the subjects of study or B.L. or B.G.L., or B.A.L.
11. M.A. (Public Administration (English Medium only)	B.A. with Politics or Public Administration as one of the subjects of study or B.L. or B.G.L. or B.A.L.
12. M.A. Sociology (English Medium only)	B.A. Degree with one of the Social Sciences, M.A. in any Social Sciences, M.A. History, M.A. Philosophy, M.A. Education, B.Sc. Home Sciences, B.S. Agriculture, B.Sc. Nursing, B.Ed., B.P.Ed., B.L. (5 years), B.A.L.
13. M.Com. (English Medium only) without quantitative techniques.	B.Com. only
IV. ONE YEAR PROFESSIONAL DIPLOMA COURSES:	
14. Post-Graduate Diploma in Co-operation and Rural Studies (English Medium only)	In-service candidates working in Co-operatives and allied institutions including non-officials with any Bachelor's Degree other than B.F.A. and B.O.L.
V. NON-CONVENTIONAL ONE YEAR POST-GRADUATE DIPLOMA COURSES:	
15. Post-Graduate Diploma in Translation	Candidates should have passed any degree examination of this University or any other University which is recognised by Andhra University as equivalent thereto with Telugu as mother tongue or any Degree with Telugu as a subject of study.
16. Post-Graduate Diploma in Environmental Studies (English Medium only)	Candidates should have passed any degree examination of this University or any other University which is recognised by Andhra University as equivalent thereto.
17. Post-Graduate Diploma in Functional English	Candidates should have passed any degree examination of this University or any other University which is recognised by Andhra University as equivalent thereto.

VI. ADMISSIONS UNDER SINGLE SITTING SYSTEM OF EXAMINATIONS:

The candidates who are enrolled into the Under-Graduate and Post-Graduate courses in the School of Correspondence Courses are permitted to take the examinations of all the papers of all the years in one sitting under the 'Single Sitting System of examinations' provided they fulfil the eligibility criteria.

A:	**GRADUATE COURSES:** 1. B.A. 2. B.Com. 3. B.Sc.	There shall be a gap of three years from the year of qualifying in the qualifying examination, (The candidates should have passed Intermediate/P.U.C./OR + 2 examination on or before 1993 main examinations).
B:	**POST-GRADUATE COURSES:** 1. M.A. English 3. M.A. Telugu 3. M.A. Hindi 4. M.A. Economics 5. M.A. History 6. M.A. Politics 7. M.A. Public Administration 8. M.A. Sociology 9. M.Com.	There shall be a gap of two years from the year of passing the qualifying examination. (The candidates should have passed the respective qualifying examination as indicated under Item III above or equivalent examination in 1994 main examination or before).

Applications will be issued from **10-8-1995**. Filled-in applications should reach the undersigned on or before **5-10-1995**.

Intending candidates may write to the undersigned by Designation for application form and prospectus by sending Rs. 20/- by Demand Draft/Money Order in favour of the Director, School of Correspondence Courses, Andhra University, Waltair-530 003, Andhra Pradesh.

The candidates have to write their name, address and course for which they want the application form on the back of the D.D. or M.O. coupon. The candidates may also remit cash at the Cash Counter of the School of Correspondence courses towards application form and prospectus. **Postal Orders and Cheques will not be accepted.**

OTHER PLACES OF SALE OF APPLICATIONS

(A) AT NEW DELHI

1. Sales Counter, Association of Indian Universities, AIU House, 16 Kotla Marg.
2. Sri Venkateswara College, Dhaula Kuan, Benito Jaurez Road.

(B) STUDY CENTERS

The Admission Application Forms and Prospectus are also available at the following Study Centres in the State of Andhra Pradesh:

1. Government College, Srikakulam; 2. M.R. College, Vizianagaram; 3. Mrs. A.V.N. College, Visakhapatnam; 4. Government College, Rajahmundry; 5. P.R. Government College, Kakinada; 6. Sir C.R. Reddy College, Eluru; 7. S.R.R. & C.V.R. Government College, Vijayawada; 8. A.C. College, Guntur; 9. D.N.R. College, Bhimavaram; 10. Silver Jubilee College, Kurnool; 11. Indian Institute of Management & Commerce, Hyderabad; 12. A.M.A.L. College, Anakapalle; 13. R.S.R. & K.R.R. College, Bobbili; 14. Noble College, Machilipatnam; 15. V.S.R. & N.V.R. College, Tenali; 16. Government Degree College, Narasannapeta; 17. S.S. & N. College, Narasaraopeta; 18. S.G.S. College, Jaggayyapeta; 19. S.K.B.R. College, Amalapuram; 20. Sri Sarvodaya College, Nellore; 21. V.R.S. & Y.R.N. College, Chirala; 22. V.V. & M. College, Ongole; 23. B.V.K. Degree College, Visakhapatnam; 24. S.K.V.P. & Dr. K.S. Raju Arts & Science College, Penugonda; 25. Y.N.M. College, Narsapur; 26. Progressive Degree College, Hyderabad; 27. Sri Kandula Obula Reddy Degree College, Bestavaripeta (Prakasam District) and 28. Government Degree College, Narsipatnam (Visakhapatnam District).

THE SCHOOL HAS NO AGENTS AND TAKES NO RESPONSIBILITY FOR PROSPECTUS ISSUED AND PROMISES MADE FOR ADMISSION BY ANY OTHER INSTITUTION.

SPECIAL NOTE FOR THE CANDIDATES WHO APPEARED FOR B.A./B.COM. ENTRANCE EXAMINATION IN JULY 1995:

The results of B.A./B.Com. Entrance examination held in July, 1995 will be announced shortly and the successful candidates in the said examination need not apply for Admission Application form and Prospectus for admission into First Year Degree Course. The School will arrange to send the Admission Application form and Prospectus along with marks statement-cum-eligibility certificate to such candidates after the results are announced. They have to pay an amount of Rs. 20/- towards the cost of admission application form and Prospectus alongwith the prescribed tuition fee at the time of admission. However the duly filled in admission application form along with the necessary enclosures including Demand Draft/Money Order receipt towards prescribed fee should reach the School of Correspondence Courses on or before the prescribed last date.

Waltair,
Dt. 26-7-1995

Prof. V. Abraham
DIRECTOR

CENTRE FOR DISTANCE EDUCATION

OSMANIA UNIVERSITY, HYDERABAD-500 007

ADMISSION NOTIFICATION - 1995

Candidates from all over India are eligible for admission without age or area restriction provided they fulfil the requisite conditions of Eligibility for various courses as detailed below :

COURSES OFFERED UNDER FORMAL SYSTEM

Course		Eligibility
1. B.A./B.Com. 3 years (year-wise)	:	Pass in Intermediate or 12th Class or an equivalent examination
2. M.Com	:	Pass in B.Com. with 40% marks in aggregate in optional subjects of a recognised university.
3. M.A. (Economics/Political Science)	:	Pass in B.A. with not less than 40% marks in Economics/ Pol. Science of a recognised University.
4. M.A. (Hindi/English/Telugu) (Literature)	:	Pass in B.A. with English/Hindi/Telugu as one of the optionals with not less than 40% marks or 50% marks in case of Part-I Language (100/200).
5. M.A. (Philosophy)	:	Graduate of any faculty (except Engineering and Technology) with not less than 40% marks in the optional subjects.
6. M.A. (Public Personnel Management)	:	Graduate of any faculty including Engineering & Technology with not less than 40% in the aggregate in the optional subjects.
7. M.Sc. (Mathematics)	:	B.A./B.Sc./Engineering Graduate with not less than 40% marks in Mathematics or 50% marks in ancillary Mathematics or a pass in PG Diploma in Mathematics of this university.
8. One year PG Diploma in Mathematics	:	Graduate of any faculty with not less than 40% marks in the aggregate in the optional subjects.

Note : SC, ST candidates with 36% marks are eligible for admission into all courses

Cost of prospectus and Admission forms (in person) : Rs. 35/-, by post : Rs. 40/- through a Bank Draft.

Last date for submission of Admission forms :

Course	without late fee	with late fee
B.A./B.Com	10th September	30th November
M.A./M.Com./M.Sc.	3rd October	31st December

COURSES OFFERED UNDER OPEN UNIVERSITY SYSTEM

(NON-FORMAL SYSTEM)

B.A./B.Com. : All Candidates residing anywhere in India who are not having formal educational qualifications and who shall have completed 18 years of age by 31-12-1995 are eligible for appearing the Eligibility Test to be conducted by the university on 22-10-1995. The candidates who pass in the Eligibility Test will be given admission in the Ist year of 3 year B.A./B.Com. degree course.

Cost of Prospectus and Application form for the Eligibility Test
(In person) Rs. 40/- (by post) Rs. 50/- through a bank draft.

Last date for submission of Application for the Eligibility Test :25-9-1995

Date of Eligibility Test :22-10-1995 (Sunday)
in Hyderabad/Secunderabad and selected centres in A.P.

Prospectus and application forms can be had in person from the Extension Counter of State Bank of Hyderabad situated at **CDE, OU, or Andhra Bank, Vidyanagar/Narayanaguda/Himayathnagar; or Canara Bank, Mettuguda Branch, Secunderabad.** Those desirous of obtaining the prospectus by post should obtain a bank draft for the amount shown above in favour of the **Director, CDE, OU**, payable at Hyderabad and send it along with a self addressed envelope (without stamps) of size 9"x21" to the **Director, Centre for Distance Education, Osmania University, Hyderabad-500 007.**

Application received through Tutorials or any other agency will be summarily rejected as we do not have any agents.

Prof. R. Krishna Rao
DIRECTOR

MADURAI KAMARAJ UNIVERSITY

INSTITUTE OF CORRESPONDENCE COURSE AND CONTINUING EDUCATION

ADMISSION NOTIFICATION

ADMISSION TO M.B.A. (DISTANCE LEARNING PROGRAMME)-1995-9

The Madurai Kamaraj University invites applications for admission to M.B.A. (Distance Learning Programme) for the academic year 1995-

ELIGIBILITY

A) Should possess a Bachelor's degree in any subject from this University or any other University recognised as equivalent thereto with th e years post qualification work experience in a business firm or organisation

or

B) Should possess a Bachelor's degree of this University or an examination accepted as equivalent thereto with a minimum aggregate of 5 % marks in Humanities and Social Sciences and 55% marks in disciplines like Natural Sciences including Mathematics and Professional Cour s like Engineering

or

C) Any post-graduate degree of the Madurai Kamaraj University or any other qualification considered as equivalent thereto

or

D) Officers of the defence services with a minimum of 10 years work experience; and be a graduate or should have successfully undergon

i) NDA/MA/Air Force Academy/Indian Naval Academy

ii) One of the following Courses :

National Defence College Course, Higher Command Course, Long Defence Management Course, Senior Defence Management Course, Defence Service Staff College Course, Technical Staff Officers Course Army, Advanced Air Armament Staff Officers Course, IAF Advanced Course at the College of Air Warfare, Specialised Advanced.

The entrance test shall be conducted in selected places in India FOR ALL candidates. THE DATE OF ENTRANCE TEST WILL BE ANNOUNCED LATER.

NOTE: Provision has also been available for those who are undergoing/discontinued the I/II/III year of M.B.A. (Full-time, Part-time, Officers of Defence Services, Distance Learning Programme) evening college degree Course.

DURATION: The duration of the Course is 3 years.

PROCEDURE FOR OBTAINING PROSPECTUS ALONGWITH APPLICATION FORM :

Prospectus alongwith application form for the Course can be had directly only from the following address. No other person/agency is appointed by this University.

A) FOR THOSE WHO ARE RESIDING WITHIN TAMIL NADU STATE

The Director, Institute of Correspondence Course & Continuing Education, MBA(Cell), Madurai Kamaraj University, Madurai 625 021

B) FOR THOSE WHO ARE RESIDING IN OTHER THAN TAMIL NADU STATE can obtain their prospectus along with application form from the following Coordinators/Programme Officers of Madurai Kamaraj University, Study Centre :

1. Dr. D.Jeyaraj, A-30, Vishal Enclave, Rajouri Garden, New Delhi.
2. Prof. C. Ravindran Nair, Institute of Management Development & Research, Mulavana Building, TC 27/1317 Convent Road, Trivandrum.
3. Mr. V. Subramanyam, 21/2F, Manohar Pukur Road, Calcutta.
4. Mr. M.Z. Nayyar, Plot No. 232, Shahid Nagar, Bhuvaneswar
5. Mr. S.R. Gupta, 6-64/1, Bhavani Nagar, Dilshuk Nagar, Hyderabad
6. Mr. M.G. Dastagiri, Noble Institute Education, 23/451 1st Floor Archari Street, Nellore
7. Mr. R. Babu, H.No.194, Prakasam Road, Tirupati
8. Mr. Y Rami Reddy, Sri Gurudev Educational Institute, 3/1353, Gandhi Road, Proddatur 516 360
9. Mr. D. Rama Rao, Rama Public School, III Lane, Kedareswarapet, Vijayawada
10. Mr N. Sesha Reddy, Aditya Academy, Srinagar, Kakinada.
11. Prof. Agumbe Nagaraj, S.V.S. College of Education, (031/G, 40th Cross 4th 'T' Block, Near 9th Block bus stand), Swathi Building, Jayanagar, Bangalore.
12. Mr. Kubendra Saikia, Cubic Computers, Upland Road, Laitumkhrah, Shillong.
13. Mr. Maduker Rao, 119, M P. Nagar, Zone II, Bhopal.
14. Mr. T.M. Balakrishnan, No. 3, West Brindavan, Pondicherry.
15. Mr. Jirendra Nath Das, National College Correspondence Education, M.C. Road, Guwahati Club, Guwahati.
16. Ms. Sujatha Lakshmi, Nagarjuna Educational Academy, I.C.C. Besides Ekasila Park, Balasamudram, Hanamkonda.
17. Mr. Gopi Mohan Maiba, Post Box No. 27, Churachandpur, Imphal, Manipur State.
18. Mr. B.B. Sudhakar, C/o St. M.B. School, Opp. Panchpaoli Police Station, Nagpur
19. Shri K. Srinivasa Rao Patnaik, Beside Vishaka B.Ed. Coachin Centre, 46-15-3 Opp Sri Surya Bus Stop, Donduparthi, Visakhapatnam.

C) FOR THOSE WHO ARE RESIDING IN GULF COUNTRIES

1. Mr. M.K. Jawahar, Regional Co-ordinator, Abu Dhabi Educational Institute, P.O.Box 71296, Abu Dhabi, U.A.E.
2. Mr. Qais Al-Ateegy, Chairman, G.I.C.P., P.O. Box 64070, Shuwaika 70451

by post on requisition accompanied by the following :

1. A DEMAND DRAFT for Rs. 250/- (Rupees Two Hundred and Fifty) only should be drawn in favour of the REGISTRAR (MBA CELL) MADURAI KAMARAJ UNIVERSITY, MADURAI - 625 021. The Demand Draft may be obtained either on the State Bank of Indi payable at Madurai Kamaraj University Branch, Madurai or any other Nationalised banks or Scheduled banks, payable at Madura CHALLANS, CHEQUES, POSTAL ORDERS, MONEY ORDERS AND CASH WILL NOT BE ACCEPTED.

2. A Self addressed envelope of 13 cms x 28 cms for Rs. 13/- if to be obtained by post.

NOTE : THE DEMAND DRAFT SHOULD BE DRAWN ON OR AFTER 2ND MAY 1995. The students are advised to write their nam and complete address in block letters on the reverse side of the Demand Draft.

The University is not responsible for any delay or loss in postal communication.

The envelope containing the requisition with the Demand Draft for obtaining M.B.A. (Distance Learning Programme) prospectus alongwit application must be superscribed as "REQUEST FOR M.B.A. APPLICATION (DISTANCE LEARNING PROGRAMME).

LAST DATE FOR ISSUE AND RECEIPT OF FILLED-IN APPLICATION IS 16th AUGUST 1995.

DIRECTOR

Published by SUTINDER SINGH, on behalf of the Association of Indian Universities, AIU House, 16 Kotla Marg, New De
Grams: ASINDU. Phones: 3310059, 3312305, 3312429, 3313390, 3323097 and 3712435. Fax: 011-3315105 Telex: 31-66180 A
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